

U.S. Department
of Transportation
**United States
Coast Guard**



Commander
Maintenance & Logistics
Command Pacific

Coast Guard Island
Alameda, CA 94501-5100
Staff Symbol: (se)
Phone: (510) 437-3626
FAX: (510) 437-5753

LSODF
2.2 VI

16478
2 July 1992

RECEIVED

JUL 06 1992

ANCHORAGE-A00/A

U. S. EPA Region 10
1200 Sixth Avenue
Seattle, WA 98101
ATTN: Mr. Mark Ader, Mail Stop HW114

RE: Preliminary Assessment for **Sitkinak Loran A Station**
AK5141190087

Dear Mr. Ader:

Pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Para. 9604 (e), enclosed is a preliminary assessment for Sitkinak Loran A Station.

If you have any questions pertaining to this matter, please contact Frank Madison Civil Engineering Unit Juneau, at (907) 463-2408 who prepared the submittal, or Bill Nichols of this office at (510) 437-5906.

Sincerely,

M. Q. STOTHERS
Chief, Environmental Branch
Maintenance and Logistics Command Pacific
By direction of the Commander

Encl: Preliminary Assessment for Sitkinak Loran A Station

Copy: Edward F. Sprang, U.S. BLM Alaska State Office
Marcia Combes, U. S. EPA Alaska Operations Office
Commanding Officer, USCG Base Ketchikan
Commander, Seventeenth Coast Guard District
Commanding Officer, USCG CEU Juneau

USEPA SF



1442846

PRELIMINARY ASSESSMENT SITKINAK LORAN A STATION

1. SITE NAME AND LOCATION: Sitkinak LORAN A Station (abandoned) located 100 air miles southwest from the USCG Support Center at Kodiak Island, Kodiak, Alaska. The physical description of the location is 56 degrees 32 minutes 10 seconds North Latitude, and 154 degrees 7 minutes 10 seconds West Longitude. This area is part of a group of islands known as the Trinity Islands (see USGS topographic map of the Island (Trinity Islands C-1). The LORAN Station itself occupies the township of 42 South, Range 31 West, Section 17 and 16.

SITE TYPE: Inactive

STATUS AND YEARS OF OPERATION: This site was operated by the U.S. Coast Guard as a navigational LORAN A Station from construction commencement of 16 April 1960 to the decision to relinquish the lands in January 1979. All lands in Federal ownership on Sitkinak Island are part of the Alaska Maritime National Wildlife Refuge, which was established by Section 303(1) of the Alaska National Interest Lands Conservation Act (P.L. 96-487, December 2, 1980). Thus, this site will remain in the refuge. The U.S. Fish and Wildlife Service has no plans to develop the site in the near future. (Personal Contact with Mr. William Mattice, Realty Specialist, Anchorage Regional Office USFWS, 1989 March).

SITE DESCRIPTION: The station consists of five main buildings: (1) the personnel barracks; (2) signal and power complex; (3) transmitter building; (4) the sewage treatment plant; and (5) the incinerator building. There are several small outbuildings adjacent to the 5000-foot runway presently used by Coast Guard operations in the refueling of CG HH-3 helicopters used for rescue operations. These outbuildings house JP-5 fuel tanks.

The relative size of the Coast Guard holdings is approximately 1800 acres.

SOURCE AND WASTE CHARACTERISTICS;

Source types and Locations, source types would be those typical of what is found at a Loran Station, these wastes are not limited to the following:

1. paint, all types(5 gallons)
2. Various paint solvents and thinners(5 gallons)
3. Lube oil (110 gallons)
4. Calcium Hypochlorite use in water purification(10 lbs)

5. Gasoline(none)
6. JP 5 fuel unknown
7. Various pieces of electrical equipment (500 lbs)
8. Parts cleaning solvents(none evident)
9. Batteries(both alkalai and lead acid) (1000 lbs)
10. Normal household waste products, cleaners etc.(consumer quantities only)
11. Degreasers(none evident)

All of the above waste streams are of a less than reportable quantities under RCRA. This site has been abandoned since prior to 1979. Wastes were in all likelihood disposed of in the nearest permitted landfill. Hazardous substances present are listed on the building by building follow up, under observations and findings. It is worthy of note that all types of waste as listed could be cleaned up with one on site vist and a few 55 gallon overpacks.

OBSERVATIONS AND FINDINGS: The following will be a point by point record of the findings and observations found at each location at the time of the assessment.

JP-5 Fuel Tank Shed: This area is a newly constructed shack that covers the JP-5 refueling system for the Support Center Kodiak's HH-3 helo's. The capacity of this tank is approximately 1,000 gallons and is currently in good condition. Many of the CG HH-3 helo's refuel here on the way out to the different islands during search and rescue operations. The CG HH-3 crew members often perform an onsite field test to determine the percentage of water in their fuel. Overall, the JP-5 refueling station shows signs of good housekeeping. Enclosure 1, page 3A.

Storage Shed: This area is used to store miscellaneous equipment and small amounts of various chemicals for the CG HH-3 helo operations. There are two waste 55-gallon drums used to hold small amounts of contaminated JP-5 fuel from the field testing operations done on the 1,000-gallon tank. The CG HH-3 helo crews only check their fuel tank on a bimonthly basis. A very small amount of waste JP-5 is being generated during this operation. Enclosure 1, page 3A.

Yellow Storage Tank: There is no evidence of leakage or spills from this tank. The use and contents of this tank is unknown at this time. The capacity of the tank is approximately 600 gallons. We were unable to sound the tank due to the rust buildup on the tank caps. Enclosure 1, page 3A.

Yellow Gasoline Tanker: This is approximately a 6,000-gallon tank which is currently being used to store gasoline for certain ranch operations. It is in good condition and there are no indications of any spillage in the surrounding area from fuel operations.

Green Storage Tank: There is no evidence of leakage or spills from this tank. The use and contents of the tank is unknown at this time. The capacity of the tank is approximately 800 gallons. We were unable to sound the tank due to the rust buildup on the tank caps. Enclosure 1, page 3A.

Fuel Oil Storage Tanks: There are seven 32,000-gallon tanks located 30 feet from the end of the runway strip, just 200 yards north of the main facility. The overall condition of these tanks is fairly good, considering how long they have been out there without maintenance.

There is a large amount of water collecting in and around the four main concrete structural foundations of the tanks, due in large part to the way they were constructed. The concrete foundations, used to support the tanks, are acting as a dam by holding whatever amount of water that flows downgrade from the runway area. Much of the water cannot drain off naturally, due to the rock formations beneath the tank foundations and the overgrowth of vegetation surrounding these areas. If these conditions continue, they may have an effect on the overall integrity of the bottom of each tank.

There was no evidence of any spillage between the west wall and the east wall. The spillage area is on the backside of the east wall facing the saltwater lagoon. Much of the fuel has spread out over an area of 25 feet from the end of the tanks and has migrated to about 90 feet downgrade along the east wall of the foundations. Enclosure 1, page 3B.

The contamination appears to have started near the valve fitting on Tank #2 and has continued its way downslope towards Tank #7. There is some piping that was used to connect the tanks to each other, but it has long since been removed from the valve fittings beneath the ends of the tanks.

Further investigation showed that the discharge from these tanks was being deposited in a nearby stream. The contamination was noticeable by the fact that several large areas of oily deposits could be seen along the stream's pathway leading to the saltwater lagoon. It also appears that on the drawings, a 4-inch pipeline leads off from the 32,000-gallon tanks to a 323,400-gallon tank which is located about 4.5 miles north on a beach front. Due to the relatively short ground time, we were unable to inspect this tank. Enclosure 1, pages 3B, 3C, 4.

Incinerator: There were no noticeable hazards in the building at the time of the inspection. A heavy gauge steel riveted drum, contents unknown, is stored outside on the south side of the building. There is also an underground storage tank (UST), 1,000 gallon capacity, that was used to supply the incinerator building at one time.

There is a large fuel contaminated area surrounding the fill pipe of this tank, measuring some 10 square feet. The fill pipe cap was found opened at the time of inspection. The tank could have filled up with water at some point, thereby pushing the remaining material to the top of the tank and out the fill tube. The spill area is approximately 7 feet in diameter. Enclosure 1, page 3.

Personnel Barracks: This building has a large amount of asbestos throughout the complex.

There is a compound located between this building and the signal/power building. Within this compound there is an undetermined amount of old rusted empty 55-gallon drums laying about in different directions. It appears as though the high winds scattered them about, not only in the compound, but throughout the surrounding fields as well.

There is another UST of 1,000 gallon capacity which we may have overlooked during our initial inspection. It is located on the west wall of the barracks. The drawing also indicates that there is a 5,000-gallon UST that was used to store gasoline and is located about 50 yards away on the south side of this building. Enclosure 1, pages 3, 3C.

Signal and Power Complex: This building has a large amount of hazardous materials stored throughout the many rooms used for storage. The main generator room contains several large drums (empty?). The ranchers appear to have used them at one time or another. There is a lot of friable asbestos falling down from the piping that runs through the building--again, some type of protective face mask should be used in these areas.

Also, there is a large electrical panel and switch gear that will need further investigating for the use of any PCB-related material. We were unable to inspect this unit closely due to the large number of drums stored in front of it.

Many of the other rooms have several large lead acid batteries stored, which were used for emergency backup power on electrical equipment at one time. There are also several car-size batteries stored on shelves for later usage; these items will need to be discarded. Small amounts of various chemicals (cleaning materials?) are also stored on the same shelves as the batteries.

Outside this complex there is an UST of 5,000-gallon capacity which is used to store gasoline. It is located on the southwest side of the building. There was no evidence of any spillage from this tank on the surface. Another UST of a 1,000-gallon capacity is located on the southeast side of this building next to the water cistern. This tank was not found by us at the time, but is indicated on a tank drawing plot plan of the facility.

Also located outside, on the east side of this building, is a fairly large water cistern partially submerged below ground. The cistern has three openings that were sealed shut. Enclosure 1, pages 3, 3C.

Sewage Treatment Building: This building is located on the northwest side of the Signal and Power Building. There is a small stream that is approximately 30 yards away on the west side of this building. This is the same stream that runs by the seven 32,000-gallon fuel oil tanks located next to the runway.

Upon entering this building, there was a noticeably strong chloride smell, which originated from the front portion of the building. There are a number of different lab chemicals lying about and a full 55-gallon plastic drum holding approximately 10 gallons of an unknown liquid which was standing in the corner. Within this room, there was a spot next to the plastic 55-gallon drum which appears to have deteriorated (corrosive?) in on itself at one time. The overall condition of this building was real poor, due to the large number of chemicals left open which spilled into the work area. Enclosure 1, pages 3, 3C.

Transmitter Building: The roof of this building has been seriously damaged by the high winds that frequent the island from time to time. A majority of the electrical equipment (panels, switches and transformers) has been removed, with the exception of a few items. The only electrical items that were found on site were two electrical potheads and a 100-pound capacitor that was being used for a door stop.

Located on the back side (west) of the building can be found a large insulator where the old transmitter tower used to sit some time ago. After speaking with the Support Center electrical engineer, it was determined that this unit is a dry-type electrical item containing no PCB fluid. Enclosure 1, pages 2, 3C.

Landfills: There were only two landfills that the ranch hand (Jim Tungate) showed us at the time of our visit. The first (1) landfill was located approximately 1 mile southwest of the runway and the facility. Due to the large areas of road being washed out, Mr. Tungate drove us to this landfill as close as possible. Unfortunately, the road ended about a mile away from the landfill and we had to walk the rest of the way. Along the washed out road, several small dump sites could be seen as we made our way to the landfill area.

The contents of these smaller dump sites appears to be batteries and cables of various sizes. Some of these dump sites appeared to have been older than others, due to the various stages of deterioration of this material into the surrounding area.

Upon arriving at the landfill, several mounds of exposed material could be seen throughout the area. The landfill appears to have

been placed at the bottom of a crescent-shaped hill facing due north. Visible observations indicate that a large amount of sediment runoff washes through the area.

An undetermined amount of drums and various other material were found to be partially buried throughout the landfill. A combination of wind, rain, and heavy runoff from the north slope has exposed the material to the surface. After closer inspection of the exposed material (drums), it was determined that they were empty. Various tractor parts and boiler tanks were also exposed and were lying in several small pools of water.

Mr. Jim Tungate, the only resident, indicated at the time that during the previous seasons, the landfill was weeping a liquid into the surrounding marshland seriously stressing the vegetation. He indicated that most of the die off had taken place during the past couple of summers (1989, 1990) and has pretty much ceased this year. Jim also stated that the landfill has been losing its topsoil covering at an estimated 4 inches or greater per year, depending on the weather conditions.

Landfill site number two (2) is located several miles just north of the facility along the existing road service leading to the beach front. This landfill was also placed in the crescent of a hill, but is facing due south towards the airstrip. Again, the road leading up to the site was washed out and could only be approached on foot. Several older and smaller dump sites could be seen from the path leading to the area.

At present, the landfill is being used by the ranchers and the miners from the other side of the island as a dumping spot for their waste. Much of the waste items disposed of here were empty drums, scrap metal, tires, batteries, and small amounts of household chemical products. As can be seen in the photo record, there are some small spill areas located within the dump itself, but not of a regulated reportable quantity.

The waste accumulated at this site is a combination of the ranchers, possible former miners on the island and the Coast Guard. It is a relatively new dump form on top of the old landfill. A combination of wind, rain and heavy runoff from the south slope has exposed some material to the surface, but nothing noticeable that would indicate that the topsoil is compromised too much. Enclosure 1, pages 4, 5.

GROUNDWATER USE AND CHARACTERISTICS; The area involved has a relatively shallow groundwater aquifer that rises due to seasonal fluctuations. Average depth 2 to three feet. Initial freshwater provided to the Loran station was obtained from a shallow freshwater lake some one to two hundred yards from the construction site in a South South West direction. There were no groundwater wells used or put in place from the initial construction. At present the population of the entire island numbers one individual. This individual acts as a caretaker for

the facility as well as acting as a ranch hand for the small herd of somewhat wild cattle that are running on the land area.

SURFACE WATER USE AND CHARACTERISTICS; Flood frequency on site would only be that of the 100 year flood plain due to the most recent findings by the Corps of Engineers. The area is typical Alaskan Coastal plain dotted with small freshwater lakes of shallow depth. Distance to the nearest surface water would be approximately two hundred yards to Mark Lake, which is minimally down gradient from the Loran Station. Surface Water body type downstream would be Sitkinak Lagoon a part of the Pacific Ocean. All surface water runoff is in the direction of Sitkinak Lagoon some 4 to 5 hundred yards in distance. There are no downstream users of water as the population served is one. Fisheries downstream are non existant, with only the Pacific Ocean fishery for bottom fish and Anadromous species in any sort of proximity.

Sensitive environments that are adjacent would be wetlands and other such areas typical of Alaskan Coastal Plains. According to the National Marine Fisheries Office, (Mr. Brad Smith, 907-271-5006, 16 June 1992) there are no endangered species in the immediate area. The only species in the entire area that are of concern would be Stellar Sea Lions who are now on the threatened list. These Sea Lions do not populate the area and have no rookeries or haul out areas within many miles of this site.

SOIL EXPOSURE CHARACTERISTICS:

There are no people living within 200 feet, nor are there any schools workers, or any type of population in the area.

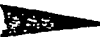
AIR PATHWAY CHARACTERISTICS;

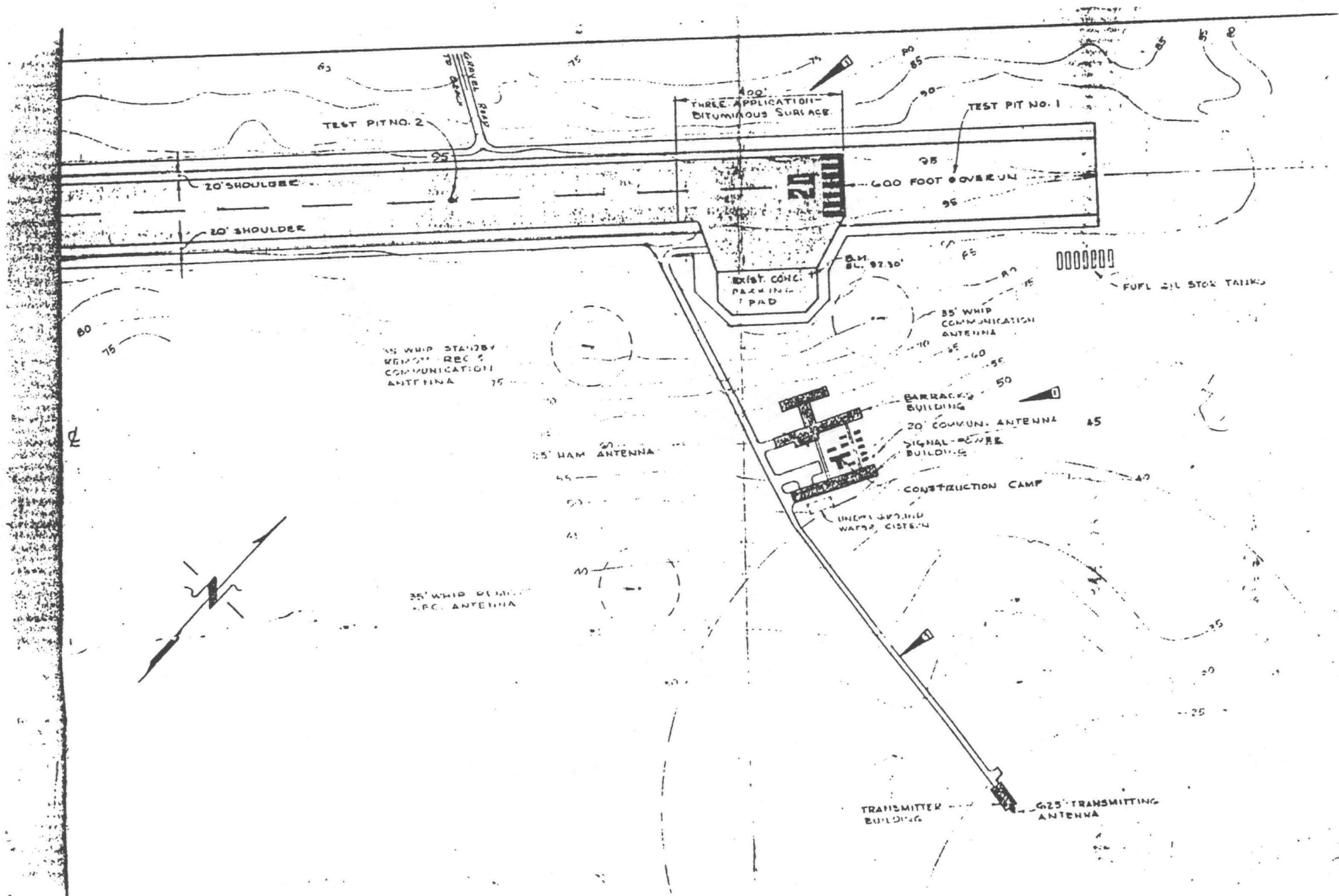
This avenue is of no concern, as there is no affected populace in the area.

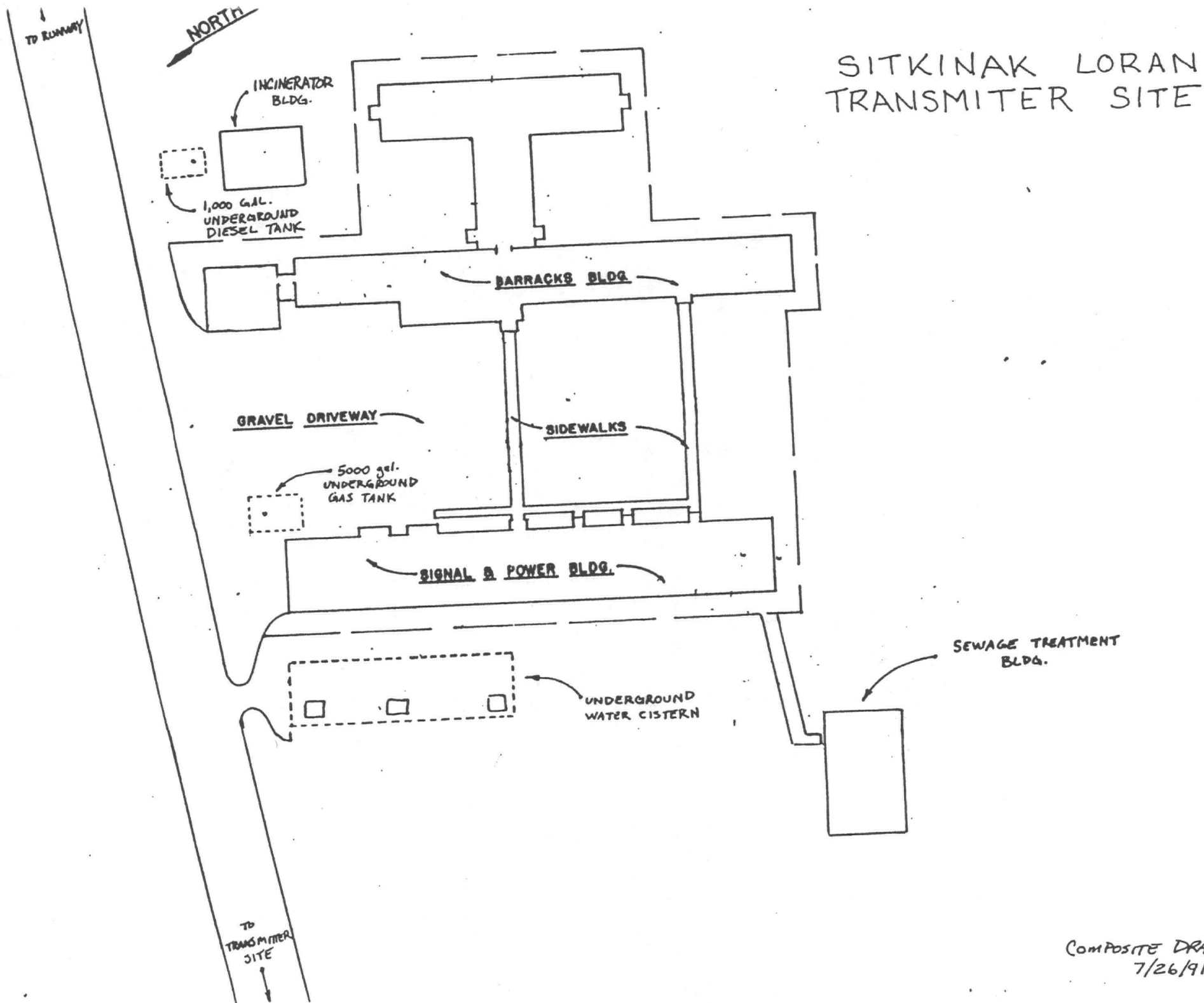
CONCLUSIONS:

Since the majority of contaminants in this area are fuel contamination, it is unlikely that this particular site would qualify under CERCLA. It is the intention of the Coast Guard to do a debris cleanup and removal of most of the consumer type quantities of cleaners and solvents sometime in the foreseeable future.

ENCL. (1/)

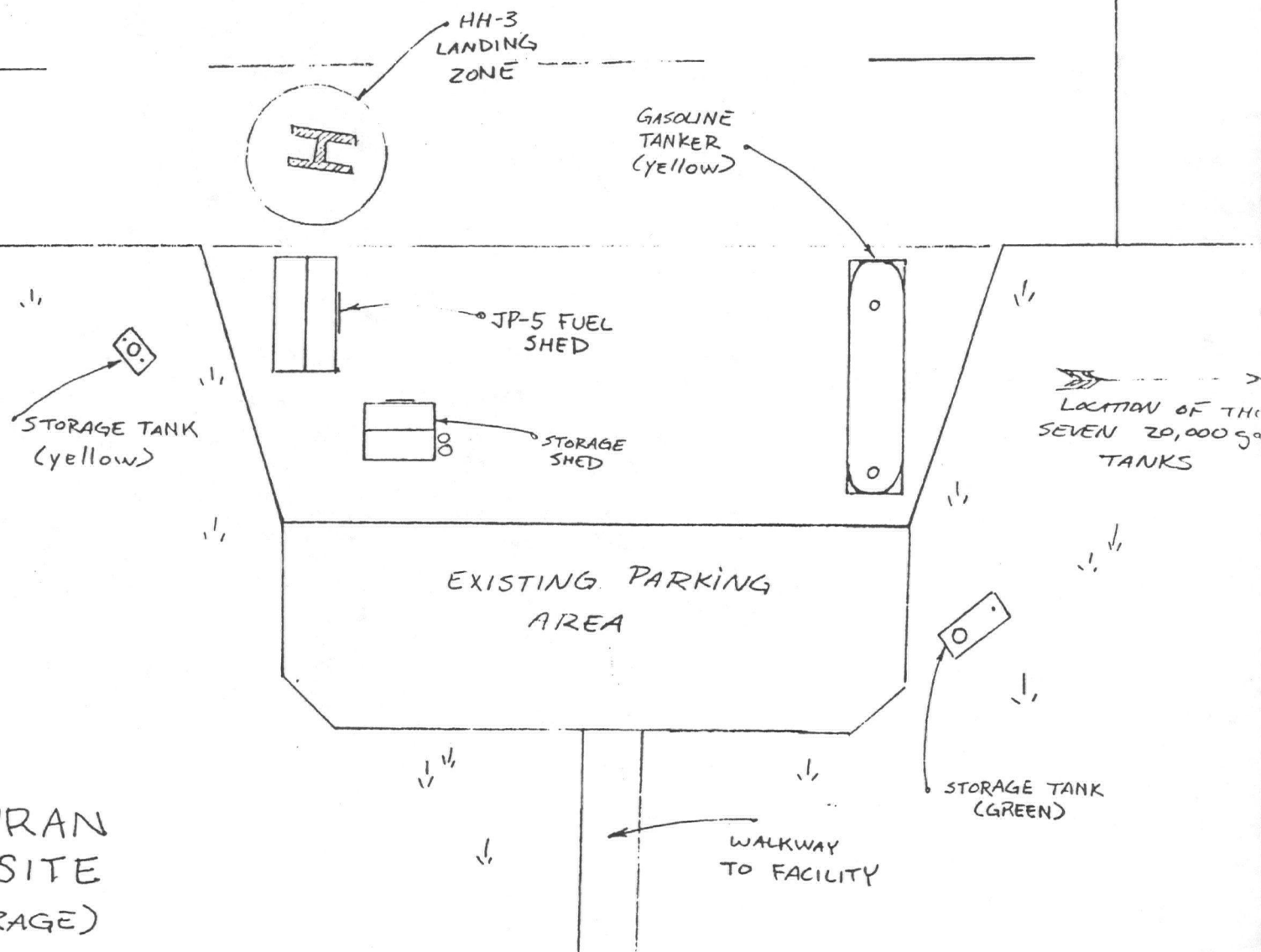
		DELIVERED RADIO BEACON & PAVING TO TRANS. BLDG. - ADDED SURFACING AT ENDS OF RUNWAY		G.P.
VISION	DATE	APPD.		
J. S. COAST GUARD		17TH DISTRICT		JUNEAU, ALASKA
CIVIL ENGINEERING				
SIGNED - JH AWN - R.A.F. ACED ECKED - <i>HEK 71</i>		<u>SITKINAK LORAN TRANS. STA.</u> <u>SITKINAK ISLAND, ALASKA</u> <u>RUNWAY PAVING</u> <u>PLOT PLAN - VICINITY MAP</u>		
<i>R+H Burt</i> DR. U.S.C.G. CHIEF OF BRANCH		APPROVED <i>J. A. Lusk</i> CAPT. U.S.C.G. CHIEF OF DIVISION		DATE 1 SEPT. 65
		DRAWING NO. 1718		
		SCALE AS SHOWN SHEET 1 OF 16		

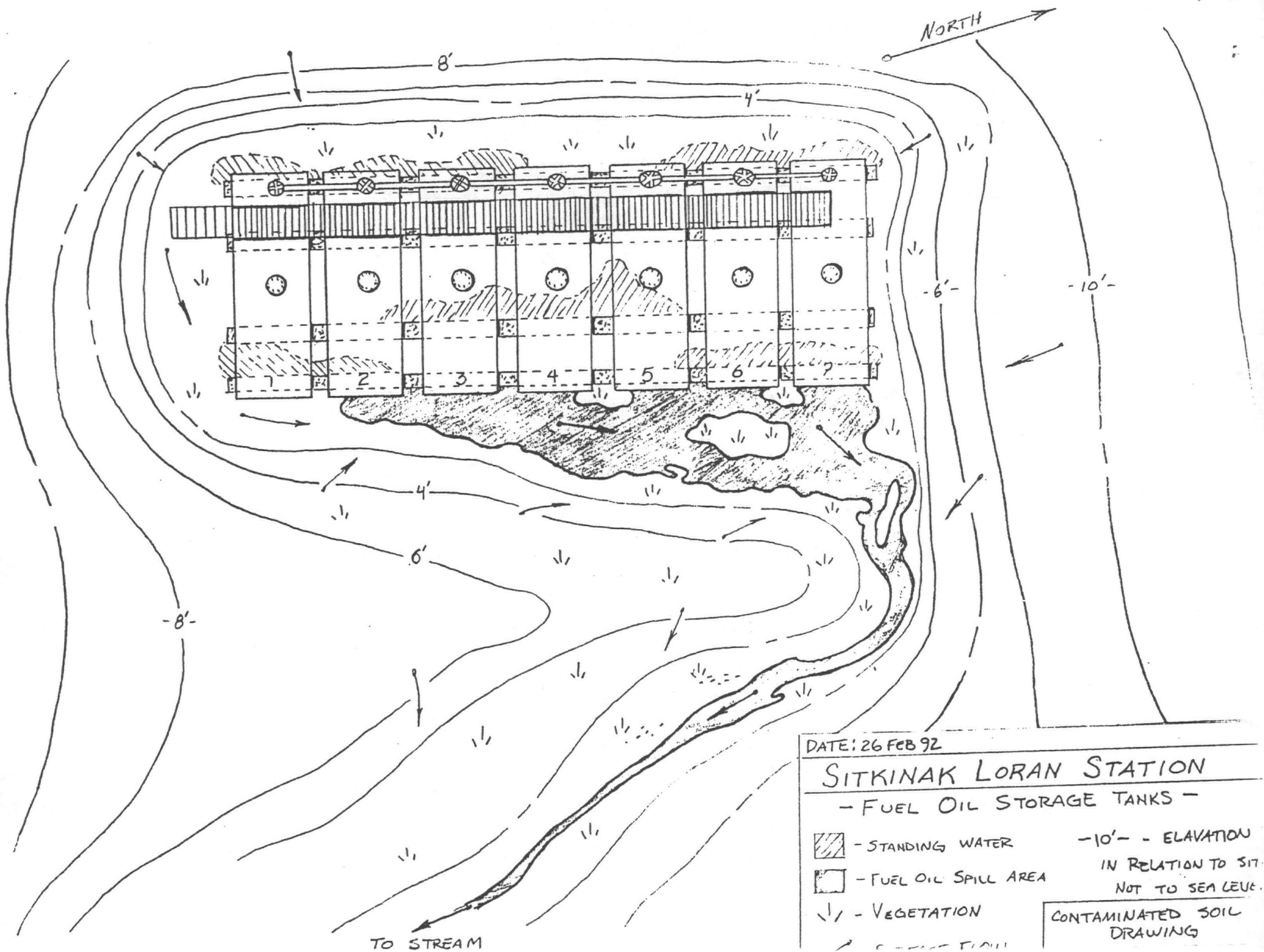


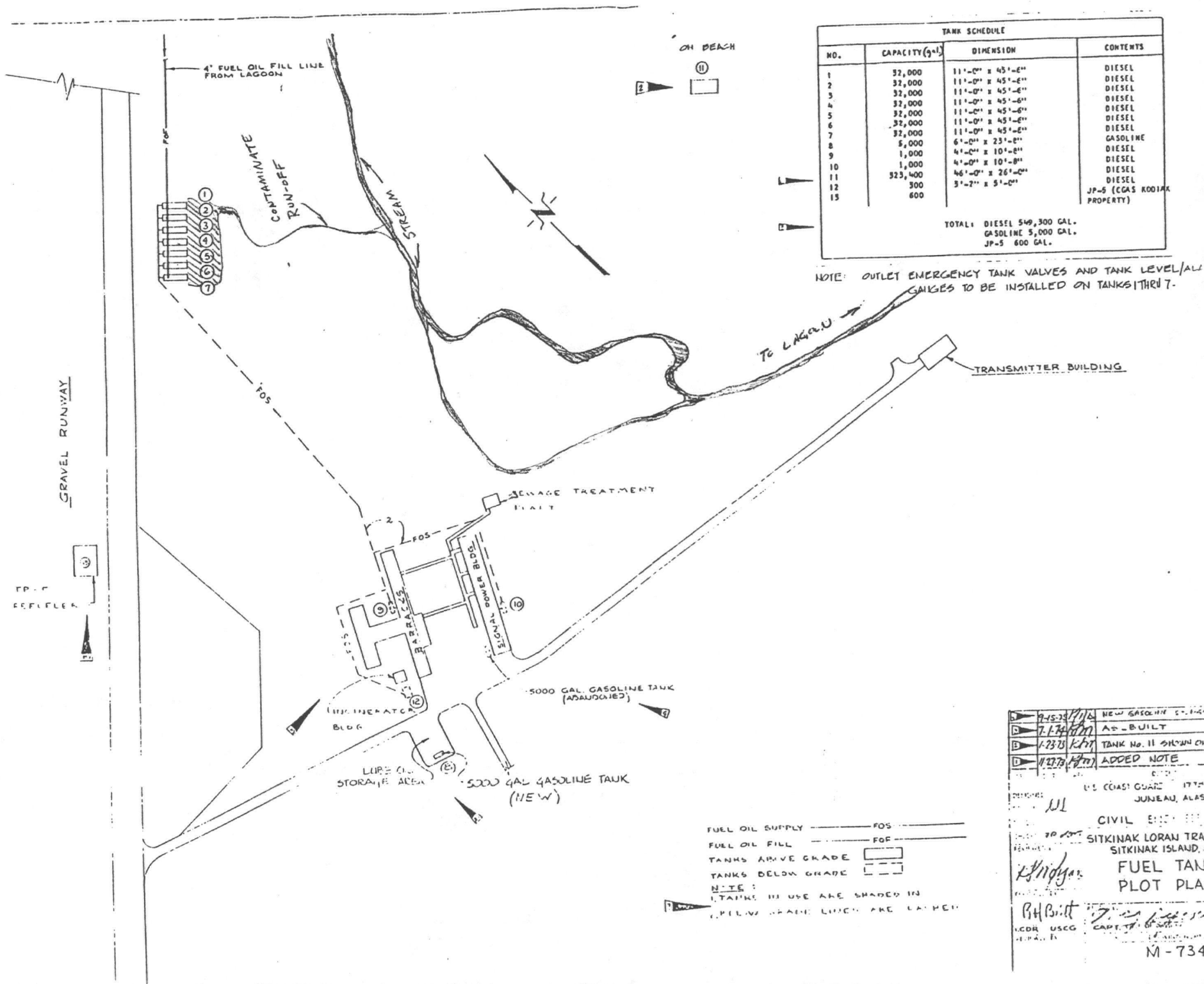


COMPOSITE DRAWING
7/26/91

SITKINAK LORAN
TRANSMITTER SITE
(RUNWAY STORAGE)







9-15-73 1716 NEW GASOLINE 5,000 GAL

7-1-74 1717 AS-BUILT

1-23-75 1717 TANK No. 11 SHOWN ON

11-27-75 1717 ADDED NOTE

U.S. COAST GUARD 1975

JUNEAU, ALASKA

CIVIL ENGINEER

SITKINAK LORAN TRAN

SITKINAK ISLAND, AL

FUEL TANK

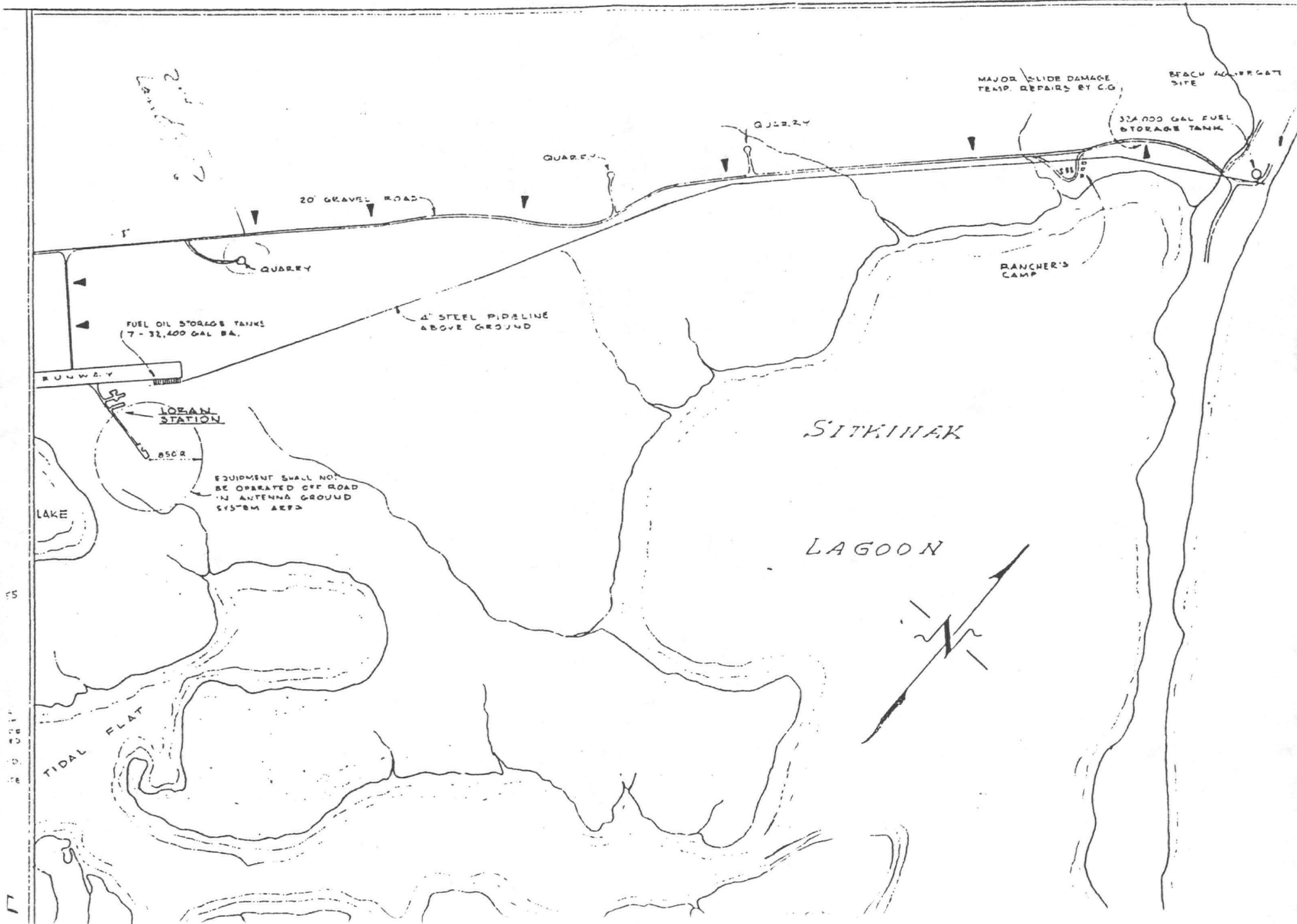
PLOT PLAN

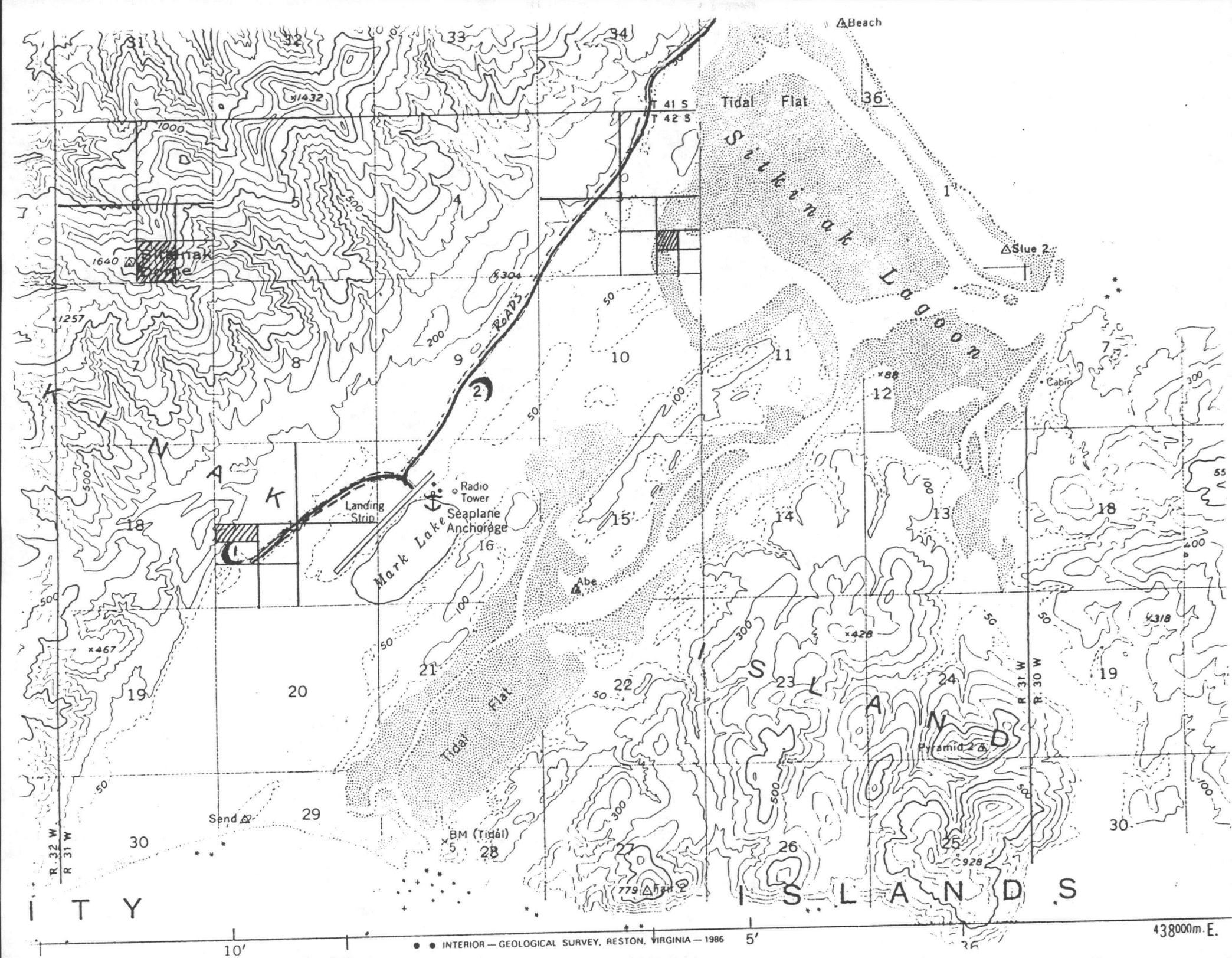
R.H. Burt

CDR USCG

1717

M-734





3	5-18-60	KGW	TANK SLOPE ADDED	C.F.W.
2	5-18-60	KGW	RELOCATED CATWALK AND HANDRAIL. ADDED CONC. PAD UNDER CATWALK LADDER.	C.F.W.
1	5-17-60	KGW	FUEL OIL MANIFOLD RELOCATED FROM BELOW TO TO ABOVE GRADE. TANK GROUNDING ADDED.	C.F.W.
REVISION	DATE	APPD:		BY

U. S. COAST GUARD

HEADQUARTERS

WASHINGTON 25. D.C.

CIVIL ENGINEERING

DESIGNED - J.W.R. - F.W.L.
DRAWN - F.W.L. C.F.E.
TRACED
CHECKED - F.W. - J.W.R.

F.W. - F.W.L.

F.W.

DOOR I UTILITIES

FUEL STORAGE & AIRCRAFT MOORING - DETAIL & PLAN

APPROVED

[Signature]

DATE

1-6-60

CHIEF OF BRANCH

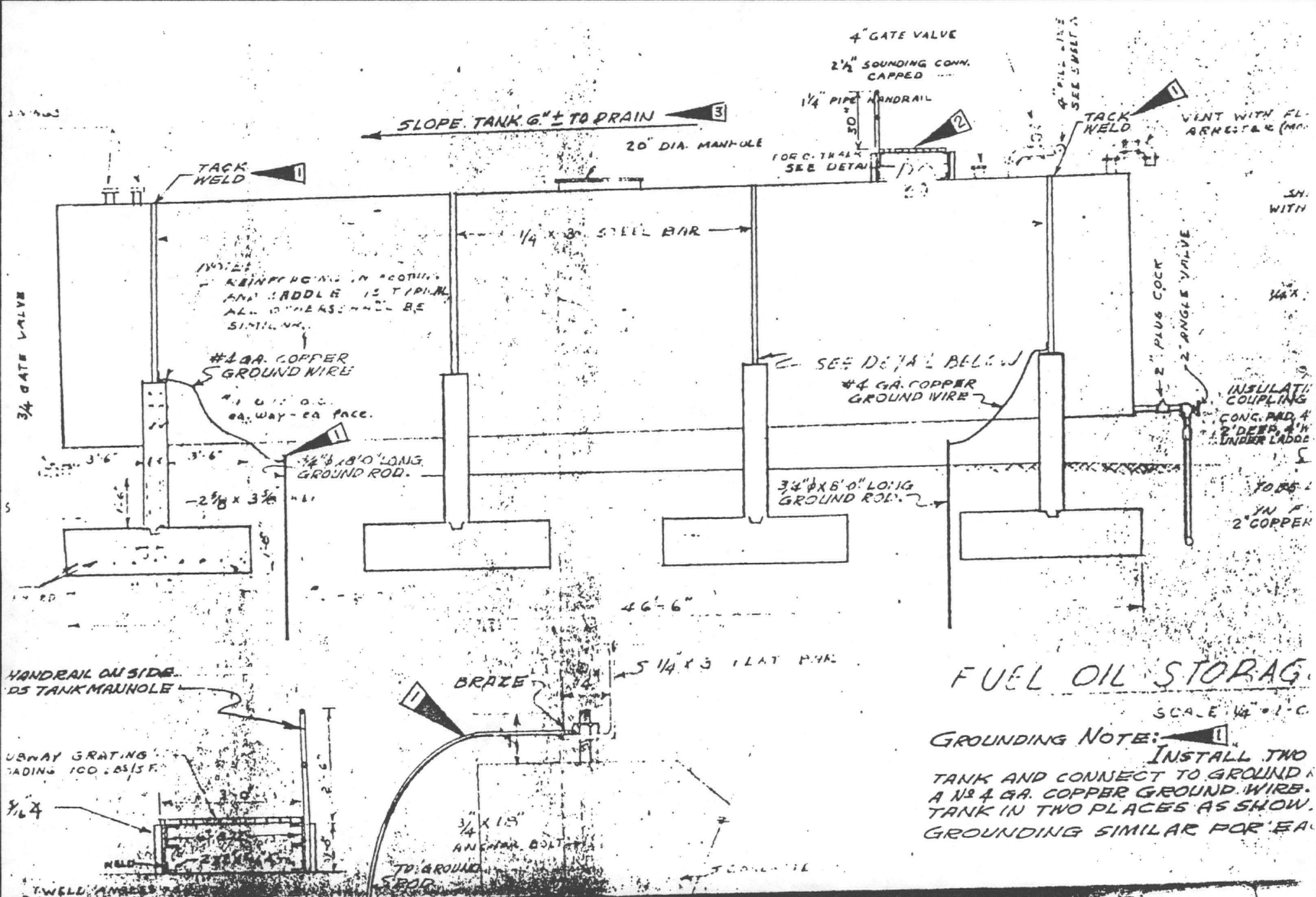
U.S.C.G. CHIEF OF DIVISION

C. G. DRAWING NO.

108142

SCALE AS SHOWN

SHEET 42 OF 48



VENT WITH FLAME
ARRESTOR (MANEL METAL)

SHIPS LADDER
WITH 1 1/4" HANDRAIL

3/4" X 3" STEEL ANCHOR

INSULATING
COUPLING

CONC. PAD, 4" THK.,
2' DEEP, 4' WIDE,
UNDER LADDER.

TO BE DETERMINED
IN FIELD
2" COPPER PIPE

TO BE DETERMINED
SEE SH. 12

1 1/2" PIPE HANGAR

15'-0"

CATWALK - 2 15'

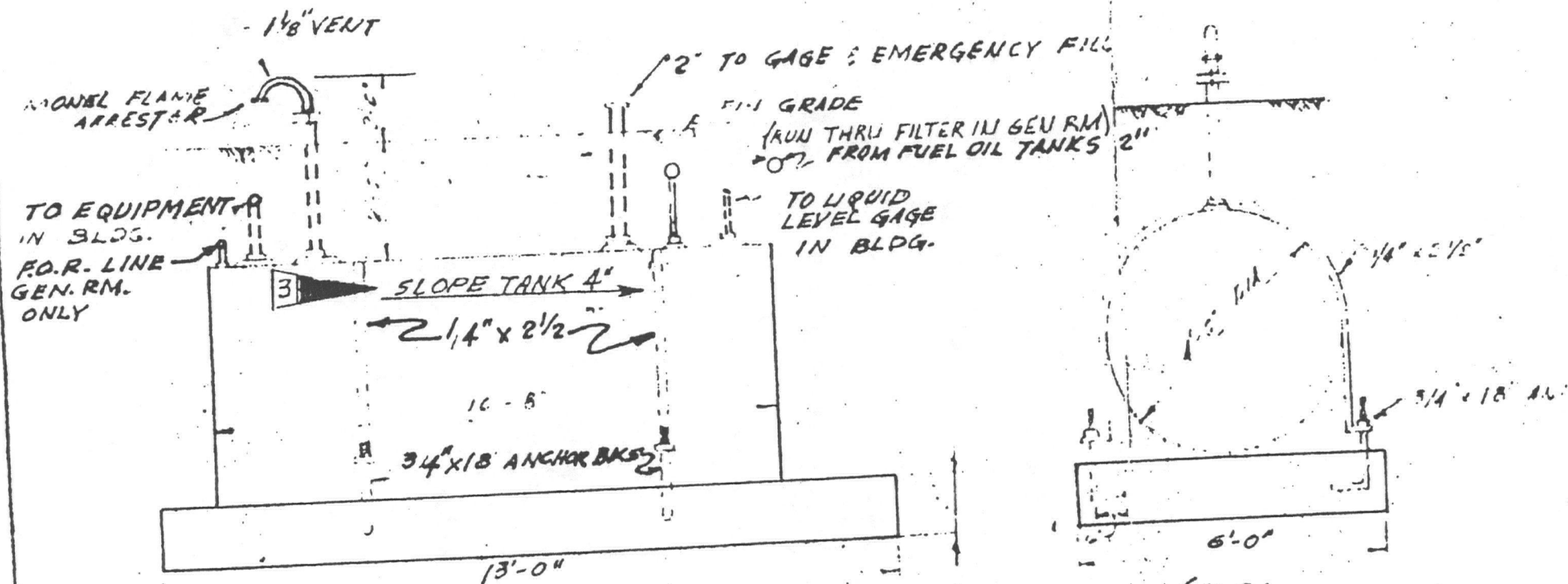
1" REMOVED EXH. INT. FILTER

REINFORCING SHALL BE CONTINUOUS THROUGH

6'-6"

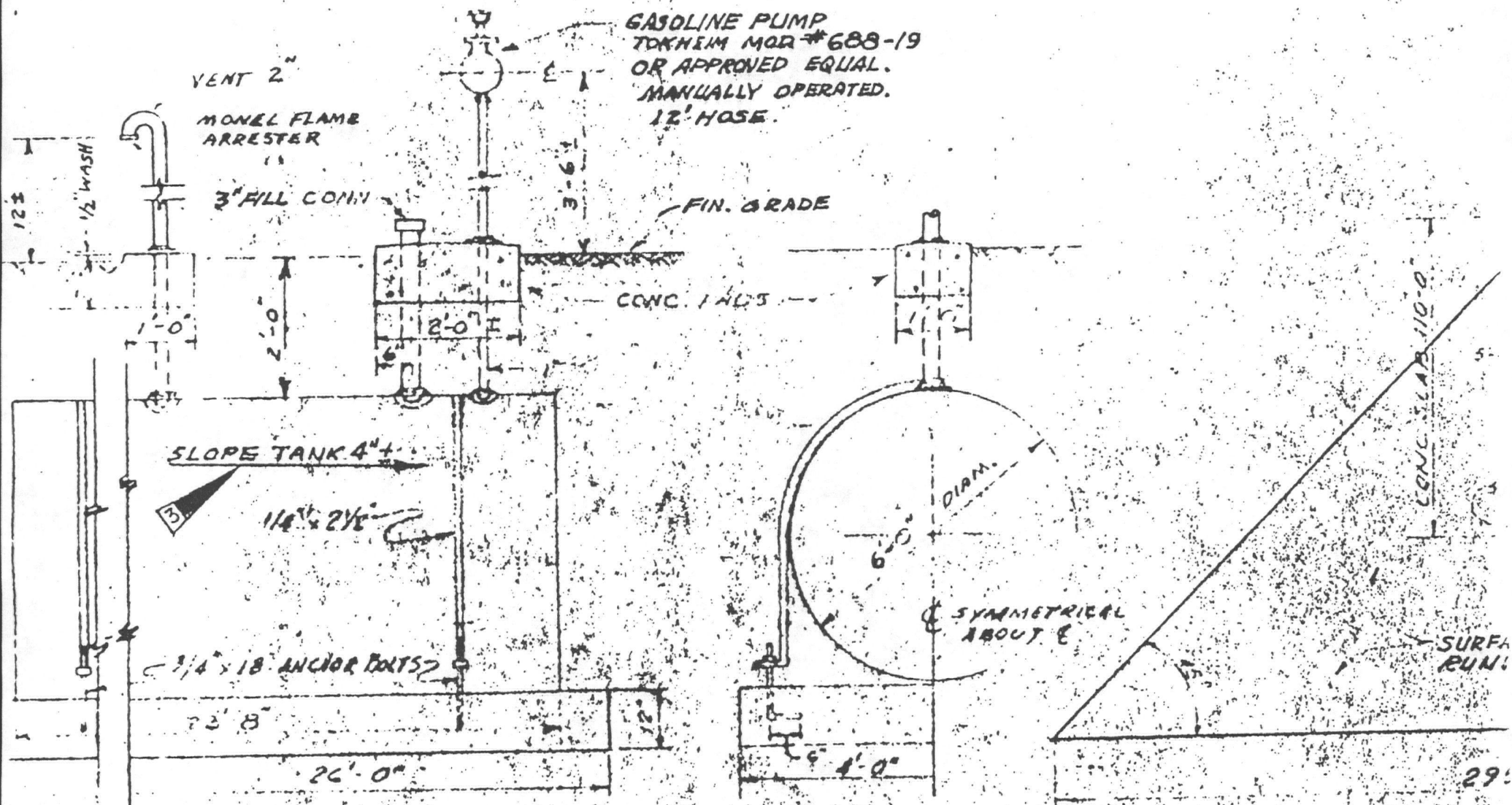
9" - 1" EQUALLY SPACED

51'-0"



1000 GALLON FUEL OIL DAY TANK (UG)

NOT TO SCALE

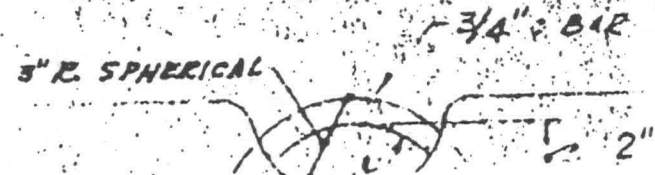


5000 GALLON GASOLINE STORAGE TANK

NO SCALE

HALF PLAN - AIRCRAFT

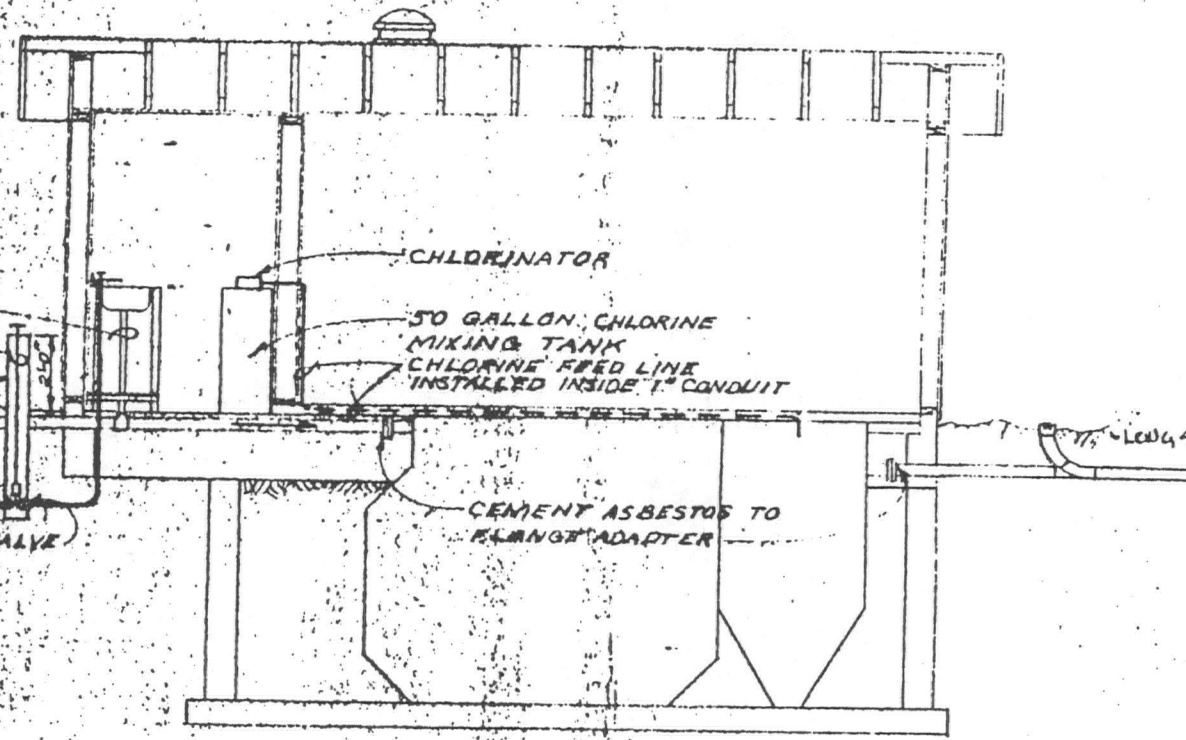
SCA



REVISION		DATE		AFPD.		BY	
U. S. COAST GUARD				17TH DISTRICT		JUNEAU, ALASKA	
CIVIL ENGINEERING							
DESIGNED - TMD		SITKINAK LORAN STATION					
DRAWN - AJH		SITKINAK, ALASKA					
TRACED -		SEWAGE TREATMENT & INCINERATOR BUILDINGS					
CHECKED - JMD J.H.		MECHANICAL PLANS, SECTIONS & DETAILS					
REVIEWED:		APPROVED					
K.H.M.		H.W. Page					
SUPV. GEN. ENGR.		CAPTAIN					
SUBMITTED		U.S.C.G. CHIEF OF DIVISION					
COR. U.S.C.G.		DATE 11-24-71					
CHIEF OF BRANCH		C. G. DRAWING NO.					
WONO 4022-72		2105					
		SCALE AS SHOWN SHEET 4 OF 6					

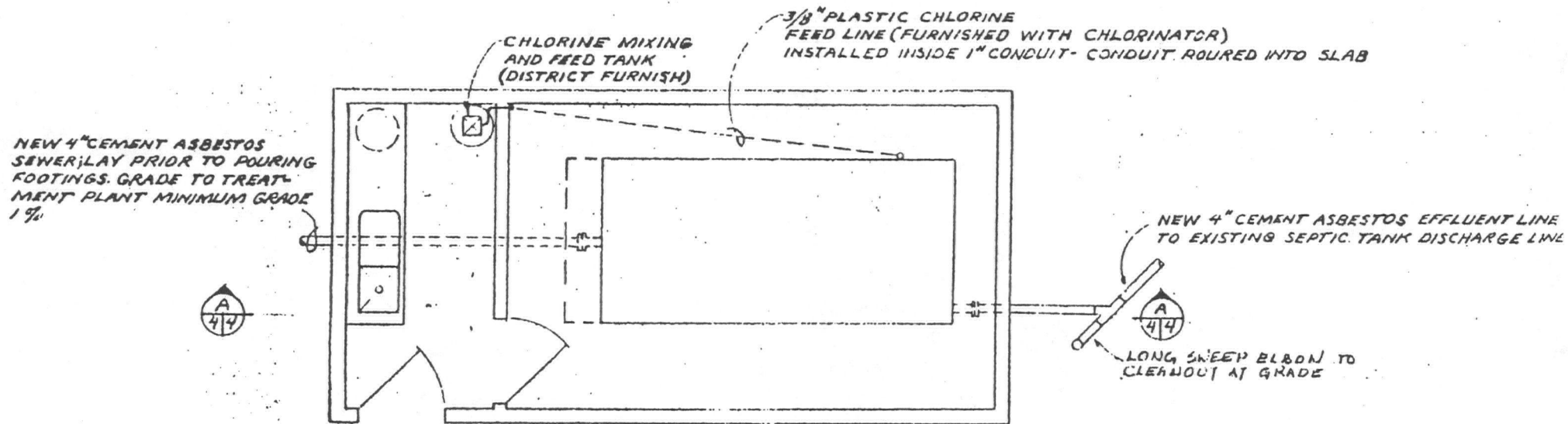
1 1/2" SINK DRAIN WITH TRAP
 CAULK INTO SEWER
 PRIOR TO FLOOR
 SLAB POURING
 1/2" PIPE OR EQUIVALENT
 REACH ROD
 4" ORANGEBURG OR O.A.
 PIPE CASING FILLED
 WITH VERMICULITE
 TO EXISTING 4"
 BITUMIZED FIBER SEWER
 (SEE PLOT PLAN)

3/4" WATER LINE
 GATE VALVE

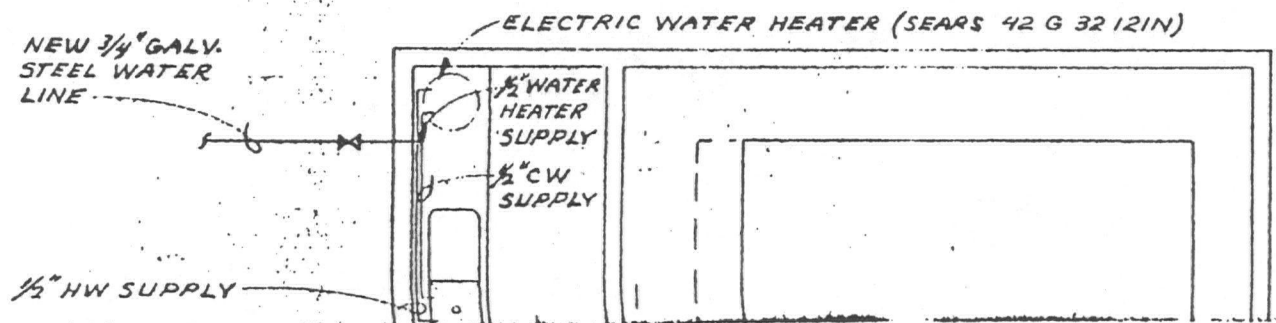


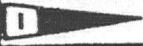
1/2" LEAD SWEEP ELBOW TO C.D. AT GRADE

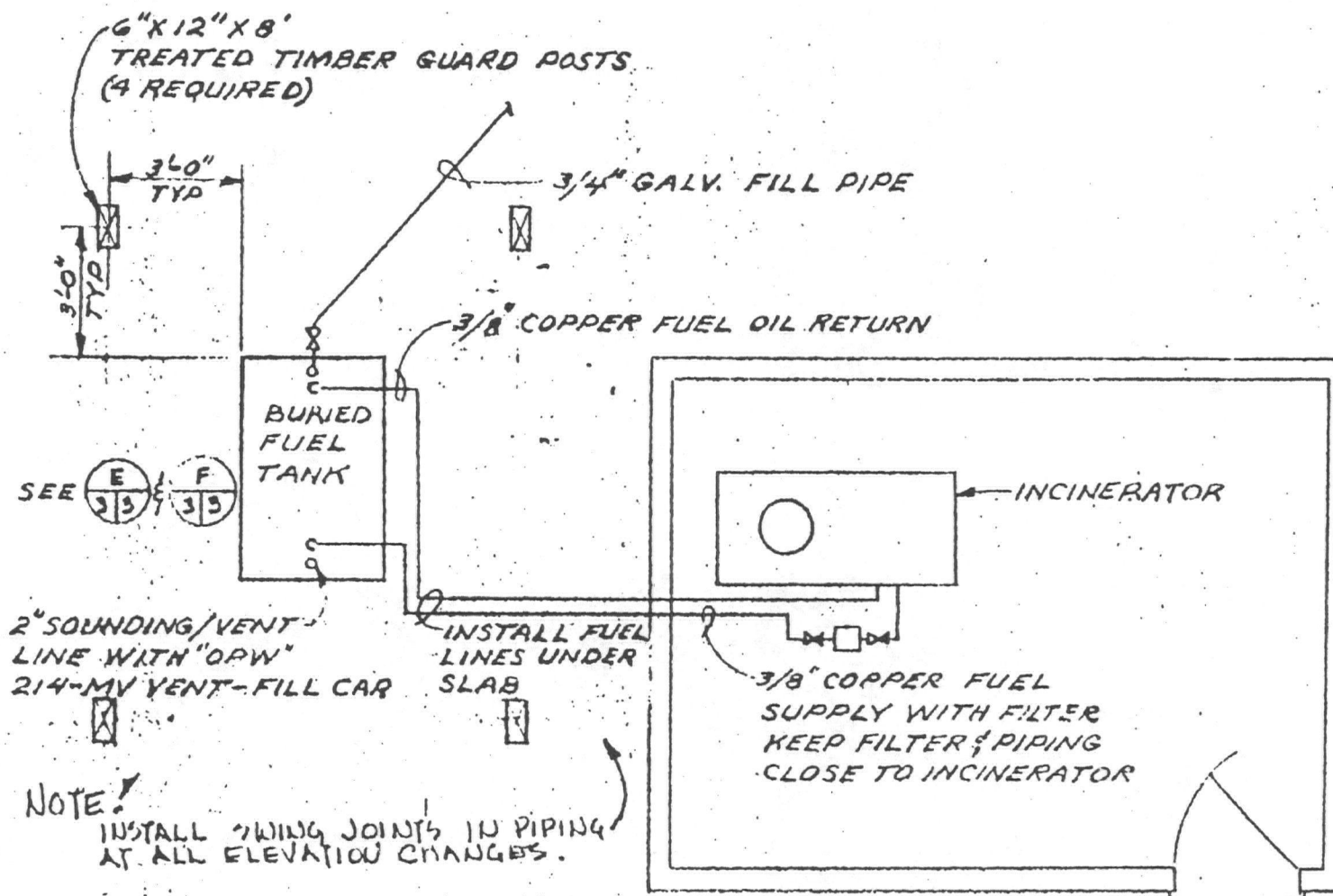
SECTION A
 1'-0"



SEWAGE TREATMENT PLANT
CONNECTION PLAN
1/4" = 1'-0"



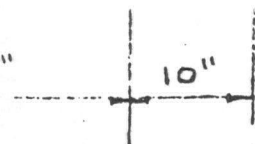
					
REVISION	DATE	APPD.			BY
U. S. COAST GUARD		17TH DISTRICT		JUNEAU, ALASKA	
<h1>CIVIL ENGINEERING</h1>					
DESIGNED - TMD REK DRAWN - AJH TRACED - CHECKED - <i>YMD</i> <i>L.H.</i>		SITKINAK LORAN STATION SITKINAK, ALASKA			
REVIEWED: <i>K.M.</i> SUPV. GEN. ENGR.		SEWAGE TREATMENT & INCINERATOR BUILDINGS INCINERATOR BLDG. PLANS & DETAILS			
SUBMITTED <i>Loeberan</i> CDR. U.S.C.G. CHIEF OF BRANCH		APPROVED <i>H.W. Paugh</i> CAPTAIN U.S.C.G. CHIEF OF DIVISION		DATE 11-29-77	
WONO 4022-72			C. G. DRAWING NO.		
			2105		
			SCALE AS SHOWN	SHEET 3 OF 6	



INCINERATOR FUEL TANK INSTALLATION

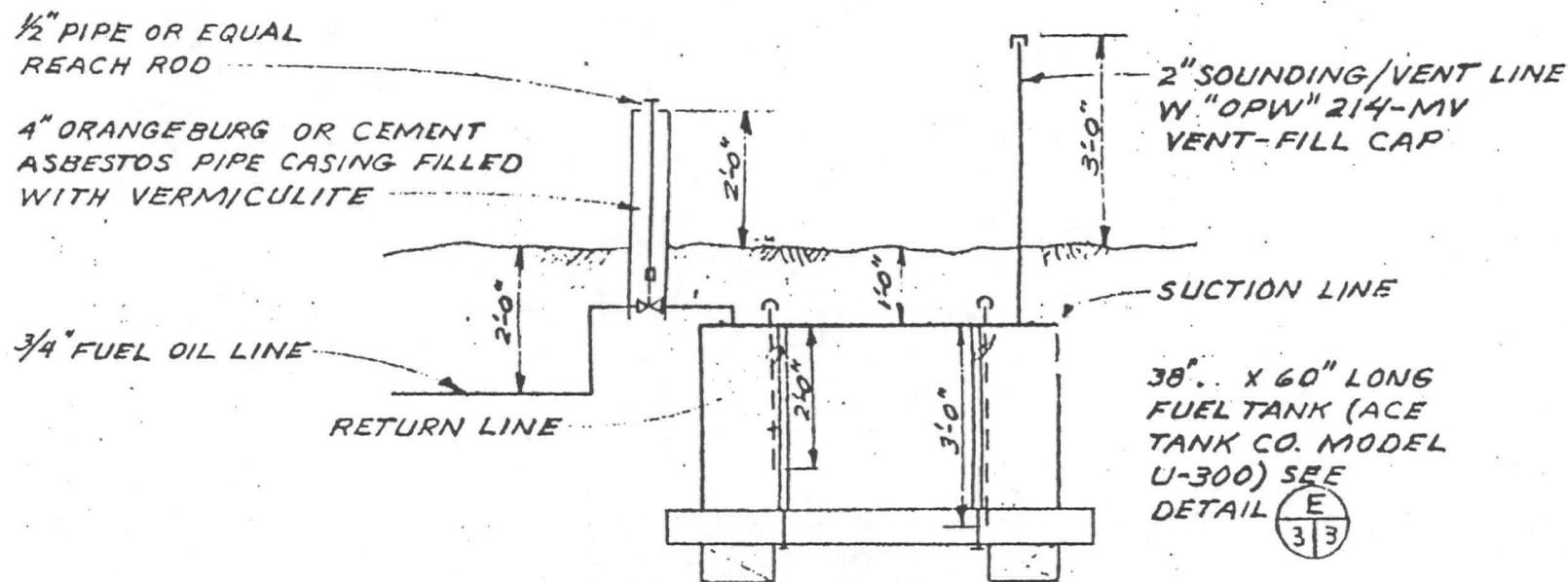
1/4" = 1'-0"

1" x 1/2" ROD CONTINUOUS (PERIMETER)



SPRING DETAIL (G1/3/3)

3/4" = 1'-0"



3/4" x 8" GMB, WASHERS, AND NUTS 4 REQUIRED, 2 WASHERS PER BOLT REQUIRED

INCINERATOR FUEL TANK (F/3/3)

NO SCALE

1/4" x 2" GALVANIZED HOLD DOWN STRAPS (2 REQ. EACH)

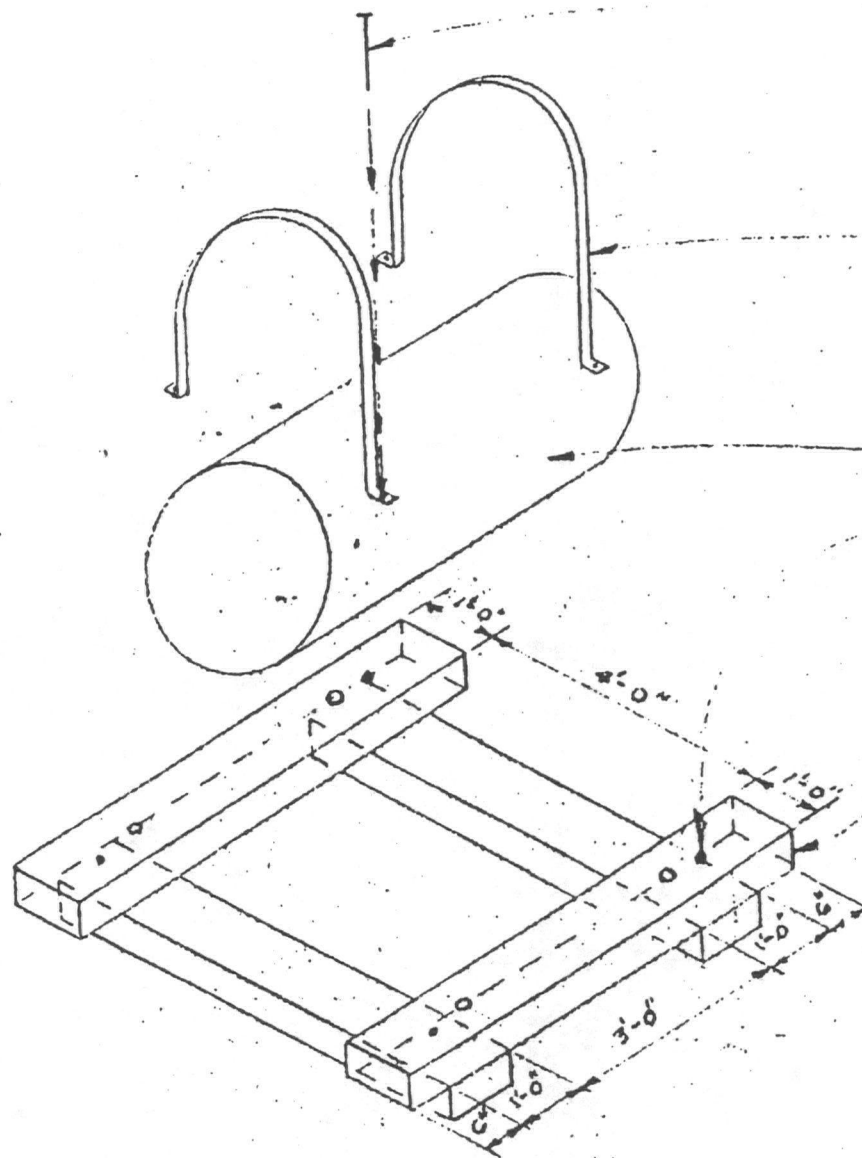
$\frac{3}{4}$ " X 8" GMB, WASHERS, AND
NUTS 4 REQUIRED, 2
WASHERS PER BOLT REQUIRED

$\frac{1}{4}$ " X 2" GALVANIZED HOLD
DOWN STRAPS (2 REQUIRED)

38" DIA X 60" LONG FUEL TANK
(ACE TANK CO. MODEL U-300)

$\frac{3}{4}$ " X 14" GMB DOUBLE WASHERS
& NUTS (4 REQUIRED)

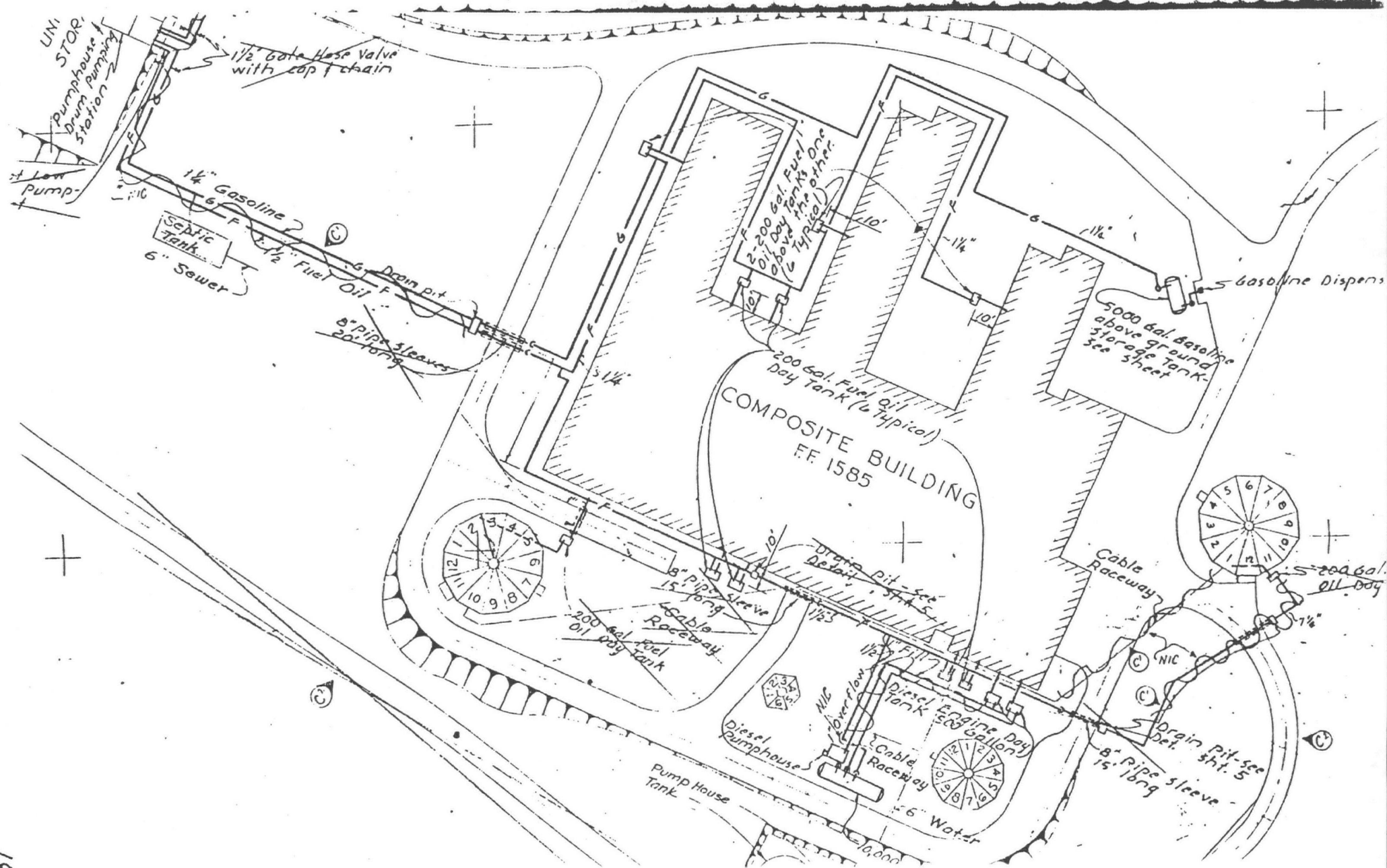
4-6" X 12" X 6'-0" PLANKS
TREATED AS PER SPECS.

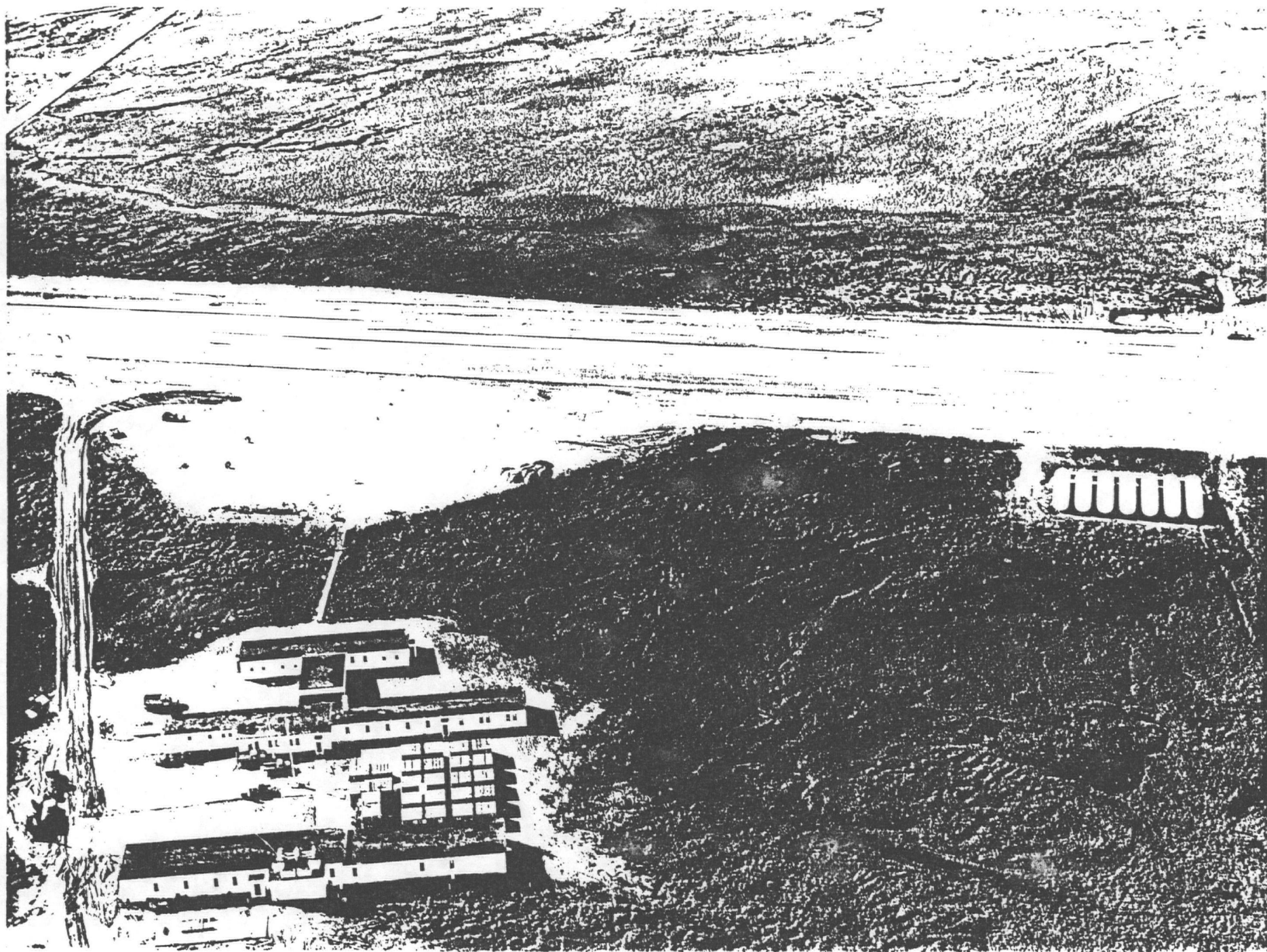


TANK ANCHOR PAD

SCALE $\frac{3}{8}$ " = 1'-0"

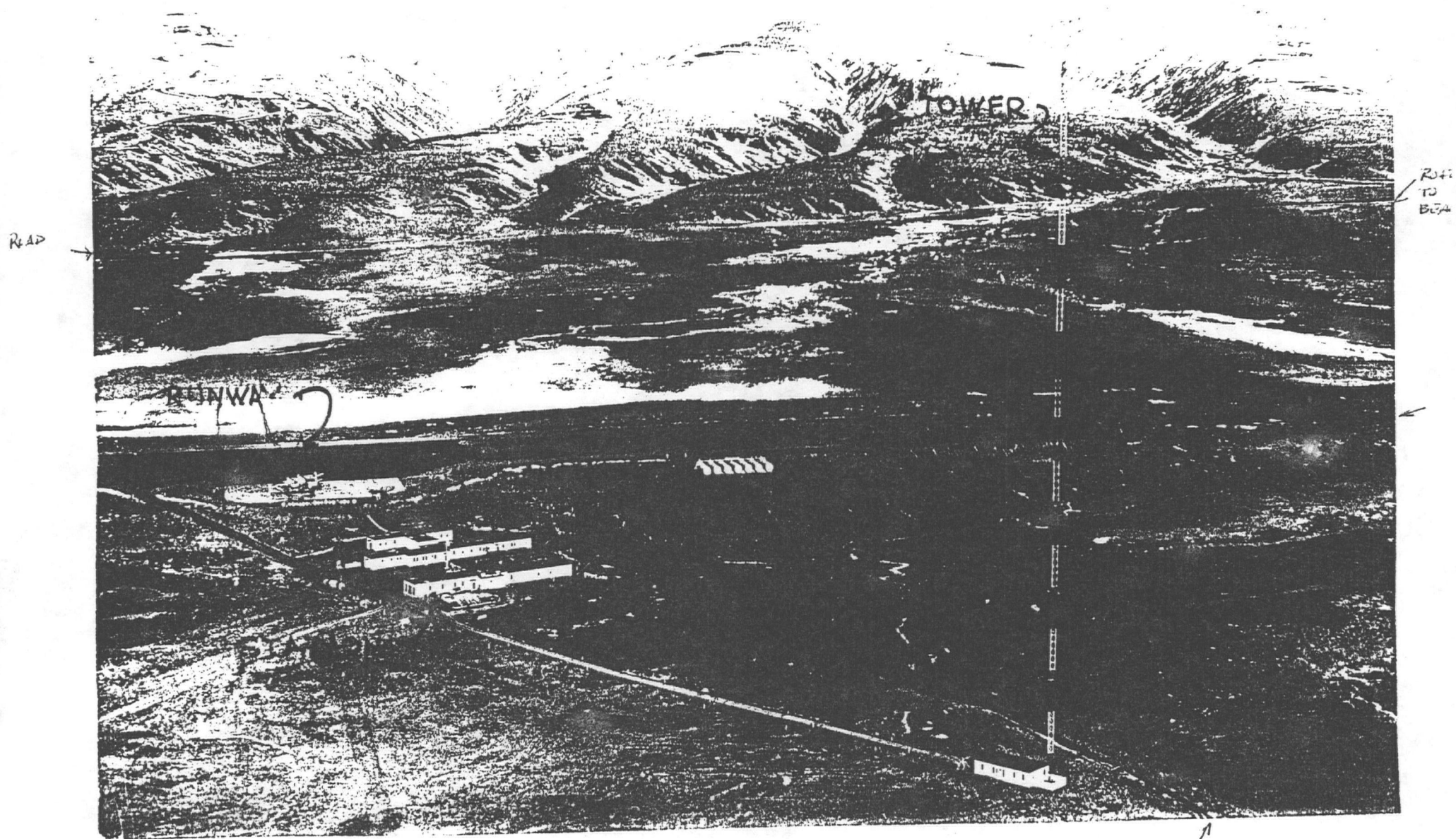






SITKINAK

AUG. 1966



□ - STREAM PATHWAY

ENCL (2)

TREASURY DEPARTMENT
U. S. COAST GUARD
CG-949 (Rev. 4-59)

PERMIT TO CARRY EXCURSION PARTY

INSTRUCTIONS

1. This permit must be framed under glass and exposed near the Certificate of Inspection and surrendered when required by inspectors in the zone in which this permit is issued.
2. Distribution (*A transmittal letter is not needed.*):
 - a. Original copy shall be issued direct to master, operator, owner, or agent of the vessel. (*Additional copies may be obtained by the master, operator, owner, or agent of the vessel upon proper request to the issuing OCMI.*)
 - b. First copy shall be delivered to the Collector of Customs for the district in which the permit is issued.
 - c. Second copy shall be forwarded to the Commandant (MVI) via the appropriate Coast Guard District Commander.
 - d. Third copy shall be retained by the issuing office.

NAME OF VESSEL GLACIER	OFFICIAL OR AWARD NO. 556 866
HOME PORT JUNEAU, ALASKA	GROSS TONS 149

ROUTE AND SPECIAL CONDITIONS

The vessel is permitted to make a voyage to commence on or about 23 JULY 1987 from Homer, Alaska to Sitkinak Island, Alaska for the purpose of transporting heavy equipment and operators of same under a contract awarded by the Department of Army and a return voyage from Sitkinak Island, Alaska to Homer, Alaska to commence on or about 05 AUGUST 1987 to transport same.

LIFESAVING EQUIPMENT

1. PRIMARY LIFESAVING EQUIPMENT

TYPE	REQUIRED BY CERTIFICATE OF INSPECTION		ADDITIONAL EQUIPMENT REQUIRED		TOTAL EQUIPMENT REQUIRED	
	NUMBER	CAPACITY	NUMBER	CAPACITY	NUMBER	CAPACITY
a. Lifeboats	0	0	0	0	0	0
b. Life Rafts	2	18	0	0	2	18
c. Life Floats	0	0	0	0	0	0
d. Buoyant Apparatus	0	0	0	0	0	0
e. Other	0	0	0	0	0	0

2. OTHER LIFESAVING EQUIPMENT

TYPE	REQUIRED BY CERTIFICATE OF INSPECTION	ADDITIONAL EQUIPMENT REQUIRED	TOTAL EQUIPMENT REQUIRED
a. Life Preservers, Adults'	7	2	9
b. Life Preservers, Children's	0	0	0
c. Wood Floats	0	0	0
d. Other IMMERSION SUITS	7	2	9

TOTAL PERSONS ALLOWED

PASSENGERS ALLOWED BY CERTIFICATE 0	ADDITIONAL PASSENGERS 4	TOTAL PASSENGERS 4	CREW 5	TOTAL PERSONS ALLOWED 9
---	-----------------------------------	------------------------------	------------------	-----------------------------------

The above named vessel is hereby permitted to carry the excursion party indicated above, on the route specified, on or between the following dates: 23 JULY 1987 and 05 AUGUST 1987

DATE 15 JULY 1987	INSPECTION ZONE WESTERN, ALASKA	SIGNATURE, OFFICER IN CHARGE, MARINE INSPECTION T.E. THOMPSON, CDR, USCG, ACTING
-----------------------------	---	--

NOTE: NO DRINKING on the Island
NO Fire Arms

Sitkinale

[REDACTED] Packing List:
coveralls - brown tee shirt
3 sets of BDU
1 field Jacket
Black Gloves w/Insects
Work Gloves
Wet weather Gear
2 pair of Boots
Over shoes
Sleeping bag
Polly Pad
Canteen w/cup
[REDACTED]
Flash light
ID Card / Dog Tags
Good Haircut
1 set of Civ.
head net & bug net
medevac proc.

OPTIONAL

Hi lift Jack
Camera
Fishing Gear
[REDACTED]

Books / magazines
Binoculars

CTT books
MRE's 14.10

Foggy pants

Dromamine

HACK SAW 1/2" ch socket
decent wrench

Propane torch
Propane heater
Propane

SUBJECT: REVEGETATION PRESCRIPTION
FOR SITKINAK ISLAND SITE

USE: 70% BOREAL RED FESCUE
30% NORTHEAST HAIRGRASS

CPT. ANTANIES

APPLY GRASS SEEDS AT THE
RATE OF 20 lbs/AC

APPLY COMPLETE FERTILIZER
20-20-10 AT 400-500 lbs/AC

EXAMPLE FOR 1 ACRE SITE:

14 lbs BOREAL RED FESCUE
6 lbs NORTHEAST HAIRGRASS
500 lbs 20-20-10 FERTILIZER

ALL MATERIALS CAN BE PURCHASED AT:

AK. MILL & FEED 276-6016
1501 E 1ST AV
ANCHORAGE

BILL PHIRK

NATURAL RESOURCES BR

DEPT 062-51811

COE

NPAEN-PM-C

ATTN: Tom Eldson

Elmendorf AFB, AK

99506

BILL SHEFFIELD, GOVERNOR

ENVIRONMENTAL CONSERVATION

REGIONAL REGIONAL OFFICE

437 E STREET/SUITE 200

ANCHORAGE, AK 99501

274-2533

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED
November 20, 1986

Roy S. Carlson, Jr.
Lieutenant Colonel,
Corp of Engineers
NPAEN-PM-C (DERA)
P.O.Box 898
Anchorage, AK 99506-0898

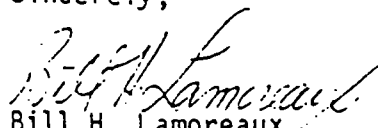
Dear Colonel Carlson:

The Department of Environmental Conservation has reviewed your Waste Disposal Permit Application for the disposal of demolition waste at three sites on Sitkinak Island as part of the Defense Environmental Restoration Account.

Based on our evaluation, Permit No. 8621-BA014 is hereby granted and found to be consistent with the Standards of the Alaskan Coastal Management Program, 6 AAC 80. Please note the conditions in Appendices A and B. This permit expires December 31, 1988 and must be renewed by that date for continued operation of the facility.

Department of Environmental Conservation regulations provide that any person who disagrees with any portion of this decision, may request an adjudicatory hearing in accordance with 18 AAC 15.200-310. The request should be mailed to the Commissioner of the Alaska Department of Environmental Conservation, P.O. Box 0, Juneau, Alaska 99811-1800 or delivered to his office at 3220 Hospital Drive, Juneau. Failure to submit a hearing request within thirty (30) days of receipt of this letter shall constitute a waiver of that person's right to judicial review of this decision.

Sincerely,


Bill H. Lamoreaux
Regional Supervisor

BHL:HF:ep
ENCLOSURES

cc: (w/ENCLOSURES)

Stan Hungerford, ADEC, Juneau
A/W District Office
Permit Records, SCRO
Henry Friedman, DEC/SCRO
Dan Neet,
Underwater Construction, Inc.

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- SOUTHCENTRAL REGIONAL OFFICE
437 "E" Street, Suite 200
ANCHORAGE, ALASKA 99501

Roy S. Carlson, Jr.
Lieutenant Colonel,
Corp of Engineers
NPAEN-PM-C (DERA)
P.O.Box 898
Anchorage, AK 99506-0898

PERMIT NO. 8621-BA014


DATE ISSUED: November 20, 1986

This permit is issued to the Corps of Engineers, P.O. Box 898, Anchorage, Alaska, 99506, for the cleanup and burial of about 17,475 cubic yards of demolition waste. This permit allows for the disposal to occur at three sites on Sitkinak Island. All three disposal sites are located within Township 42 South, Range 31 West, Seward Meridian. The Sitkinak Dome site is within the SE1/4 of the SW1/4 of Section 6. Sitkinak site #1 is within the NE1/4 of the SW1/4 of the SW1/4 of Section 3. Sitkinak site #2 is within the N1/2 of the NW1/4 of the SE1/4 of Section 17.

This permit is subject to the conditions contained in Appendices A and B which are incorporated herein by reference.

This permit is issued under provisions of Alaska Statutes 46.03, the Alaska Administrative Code as amended or revised, and other applicable State laws and regulations.

This permit is effective on issuance and expires December 31, 1988; it may be terminated or modified in accordance with AS 46.03.120.



Bill H. Lamoreaux
Regional Supervisor

SITKINAK

APPENDIX A

A. Application Compliance:

This permit is based on an application submitted on August 17, 1986 and supplemental information submitted on November 10, 1986. The Permittee must comply with that application and the Defense Environmental Restoration Account, Contract Documents No. DACA 85-86-B-0052, unless modified in this permit. All conditions of this permit apply to the three disposal sites indicated in the application. Additional modification may be requested, but must be authorized by a permit amendment before that modification is effective.

B. Removal of Existing Waste:

1. The Permittee shall remove all:

- a. debris specified in Corps of Engineers Contract #DACA 85-86-B-0052 from the unpermitted waste sites;
- b. soil saturated with petroleum products;
- c. soil contaminated with waste defined as hazardous under 40 CFR 261 and 18 AAC 60.910(11).

2. The Permittee shall grade the cleaned up area to the natural contours of the area.

3. The Permittee shall revegetate cleaned up waste sites with indigenous or existing plant species or develop another appropriate surface finish such as a roadway or pad to prevent erosion. Revegetation is not required in areas which normally do not sustain plant growth such as sandy beaches and rock areas.

C. Disposal Site Preparation

The Permittee shall:

1. construct and maintain diversion structures (ditches or berms), if necessary, to prevent surface water from entering the landfill area;
2. develop a trench or defined containment area for the waste as described in the application;
3. develop a separate area within the disposal site for asbestos containing material, if such material is to be disposed of at the site, and;

- a. maintain barriers around the asbestos disposal area to control access;
- b. post signs at the asbestos disposal site entrance and at 100 foot intervals along the site boundary that state in one inch or taller lettering:

ASBESTOS WASTE DISPOSAL SITE
DO NOT CREATE DUST
BREATHING ASBESTOS IS
HAZARDOUS TO YOUR HEALTH

D. Site Operation

1. Burial of Demolition and General Debris Waste

The Permittee shall:

- a. Ensure that all barrels and tanks are empty of liquids before crushing and burying;
- b. crush and flatten all barrels and tanks;
- c. consolidate and compact all deposited waste;
- d. cover paper and light objects with a minimum of six inches of earth material on the day of deposition to control litter;
- e. ensure that the ~~final cover contour is no steeper than a 3~~ horizontal to 1 vertical slope;
- f. within 90 days after the last waste deposition, apply a final cover of at least two feet of earth material, of which the uppermost six inches contains soil capable of sustaining plant growth.
- g. ~~contour the final cover to prevent ponding and erosion~~ and to minimize the amount of water entering the solid waste; and
- h. establish a vegetative cover over the closed waste disposal site, using indigenous or existing plant species, within the first possible growing season, to prevent erosion. A vegetative cover is not required at the Sitkinak Dome site if stable rock cover material is used.

2. Burning

Incineration of waste must comply with the Air Quality Control Regulations 18 AAC 50.040. The operation of an incinerator with a rate capacity of 1,000 pounds per hour or more will require an air quality permit. Open burning of waste must comply with the open burning regulations 18 AAC 50.030.

3. Asbestos Disposal Procedures

The Permittee shall ensure that:

- a. asbestos containing material is only disposed of in the designated asbestos disposal area;
- b. friable asbestos is properly packaged according to the following before accepting at the facility:
 - i. Friable asbestos waste must be thoroughly wetted and placed in a leak-tight container before burial. Containers may be barrels, drums, or double - four mil or thicker plastic bags.
 - ii. All friable asbestos containers shall have a warning label attached that states:

CAUTION
CONTAINS ASBESTOS
AVOID OPENING OR BREAKING CONTAINER
BREATHING ASBESTOS IS HAZARDOUS
TO YOUR HEALTH

or

CAUTION
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
BREATHING ASBESTOS DUST
MAY CAUSE SERIOUS BODILY HARM

- c. non-friable asbestos material must be buried in the designated asbestos disposal area in a manner that does not result in the release of asbestos dust. There are no regulations which require non-friable asbestos to be packaged or labeled, but in some cases packaging may be appropriate to prevent the release of asbestos dust. The generation of asbestos dust from non-friable asbestos material is a violation of the National Emission Standards for Hazardous Air Pollutants and is not permitted.

Waste Deposition and Covering

- d. asbestos waste is carefully placed into the designated disposal area in a manner that will not break the containers or create asbestos dust.
- e. the waste and containers are covered with at least six (6) inches of non-asbestos containing material by the end of each day of waste deposition.

f. Final cover of at least three (3) feet must be applied within 90 days after the last waste deposition to areas that will not receive more waste within one (1) year.

g. signs and barriers are removed after the site has been closed.

4. Litter

The Permittee shall collect all litter in or adjacent to the facility and return it to the working face for burial.

5. Site Restrictions

The Permittee shall:

a. Prohibit the disposal of solid waste within four feet of the anticipated high groundwater table.

b. Ensure that surface water runoff does not flow into or through the waste disposal site.

E. Prohibited Waste

1. Hazardous Wastes

Waste defined as hazardous under 40 CFR Part 261 and 18 AAC 60.910(11) is prohibited in this landfill except for asbestos. (See section D.3 of this permit).

2. Oily Wastes

The Permittee shall prohibit the disposal of liquid or semi-liquid oily (hydrocarbon) waste. Oil contaminated soil is permitted if the soil is not saturated and the oil fully absorbed.

F. Monitoring

1. Photographic Record

The Permittee shall photograph each disposal site:

a. before site use;

b. as prepared for waste deposition;

c. after waste deposition;

d. after final cover has been applied; and

e. after revegetation during the summer following closure.

2. Contingency Monitoring

- a. The Permittee shall take grab samples of any adjacent surface waters or ground water and have them analyzed for any of the parameters required by the Department if circumstance or evidence indicate that contamination has occurred. Such a request to monitor water quality shall be determined by the Department's Regional Supervisor. The decision to monitor will be based on a review of analytical results or evidence collected during a site inspection by Department staff or its designee.
- b. Sample and analyze the water according to standard methods required by the Department.
- c. Provide copies of the results of the above analysis to the Department's Southcentral Regional Office within sixty (60) days of the sampling date.

G. Closure

The Permittee shall ensure that the waste facility is closed in accordance with this permit. Closure notification is required under section H.2. of this permit.

H. Reporting and Records

1. The term "department" used in this section refers to the Alaska Department of Environmental Conservation's Southcentral Regional Office at 437 E Street, Suite 200, Anchorage, Alaska 99501.

The Permittee shall:

2. Notify the department in writing, within 15 days after site use has begun, and, 30 days after final closure of the site.
3. Prepare as-built or record drawings showing the location and volume of waste deposited at the solid waste disposal site and shall file those drawing with the department within 60 days of the expiration of this permit. The location of the asbestos disposal must be accurately indicated.
4. Provide a record to future landowners that asbestos waste has been buried on the property and that it would be hazardous to attempt to excavate that area. The location of the asbestos deposit should be conveyed with the land title or deed document and legally recorded with the local recorders office.
5. Submit photographs required under F.1.a, b, c and d to the department within sixty days of the closure of all sites.

6. Submit the photographs required under section F.1.e of this permit to the department within one year after site closure.

I. Violation and Enforcement

1. The non-compliance of any section of this permit constitutes a violation of this permit.
2. Pollution, as defined in AS 46.03.90 resulting from the operation of this permitted facility, constitutes a violation of the permit.
3. Definition of Water Pollution

For purposes of this permit, pollution of surface or subsurface waters beyond the facility boundary shall be defined as ground-water and/or surface water contaminant levels exceeding levels specified in 18 AC 70 (Water Quality Standards) except those parameters documented as having natural background levels already exceeding these limits;

4. The Department reserves the right to require the Permittee to take mitigative action to prevent pollution should circumstances indicate that pollution is imminently probable if no corrective action is taken to prevent contaminant release from the facility.
5. The Permittee shall correct any water or air quality violations or decomposition gas hazards caused by the deposited wastes or their interaction with the environment.

SITKINAK

APPENDIX B

GENERAL CONDITIONS

1. Access and Inspection

The Permittee shall allow the Commissioner or his representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit and State law.

2. Information Access

Except for information relating to confidential processes or methods of manufacture, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the Southcentral Regional Office of the Alaska Department of Environmental Conservation at 437 E Street/Suite 200, Anchorage, Alaska, (phone 274-2533).

3. Civil and Criminal Liability

Nothing in this permit shall relieve the Permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including but not limited to accidents, equipment breakdowns, or labor disputes.

4. Availability

The Permittee shall post or maintain a publicly available copy of this permit at the disposal facility or, if that is not feasible, at the operator's place of business.

5. Adverse Impacts

The Permittee shall take all necessary means to minimize any adverse impact to the receiving waters or lands resulting from violation or noncompliance with any limitations specified in this permit, including any additional monitoring needed to determine the nature and impact of the non-complying activity. The Permittee shall clean-up and restore all areas adversely impacted by the noncompliance.

6. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.

SITKINAK
APPENDIX B (CONT'D.)

7. Cultural or paleontological resources

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources are to be stopped, and the Office of History and Archaeology, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (561-2020).

8. Applications for renewal

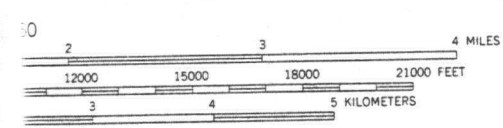
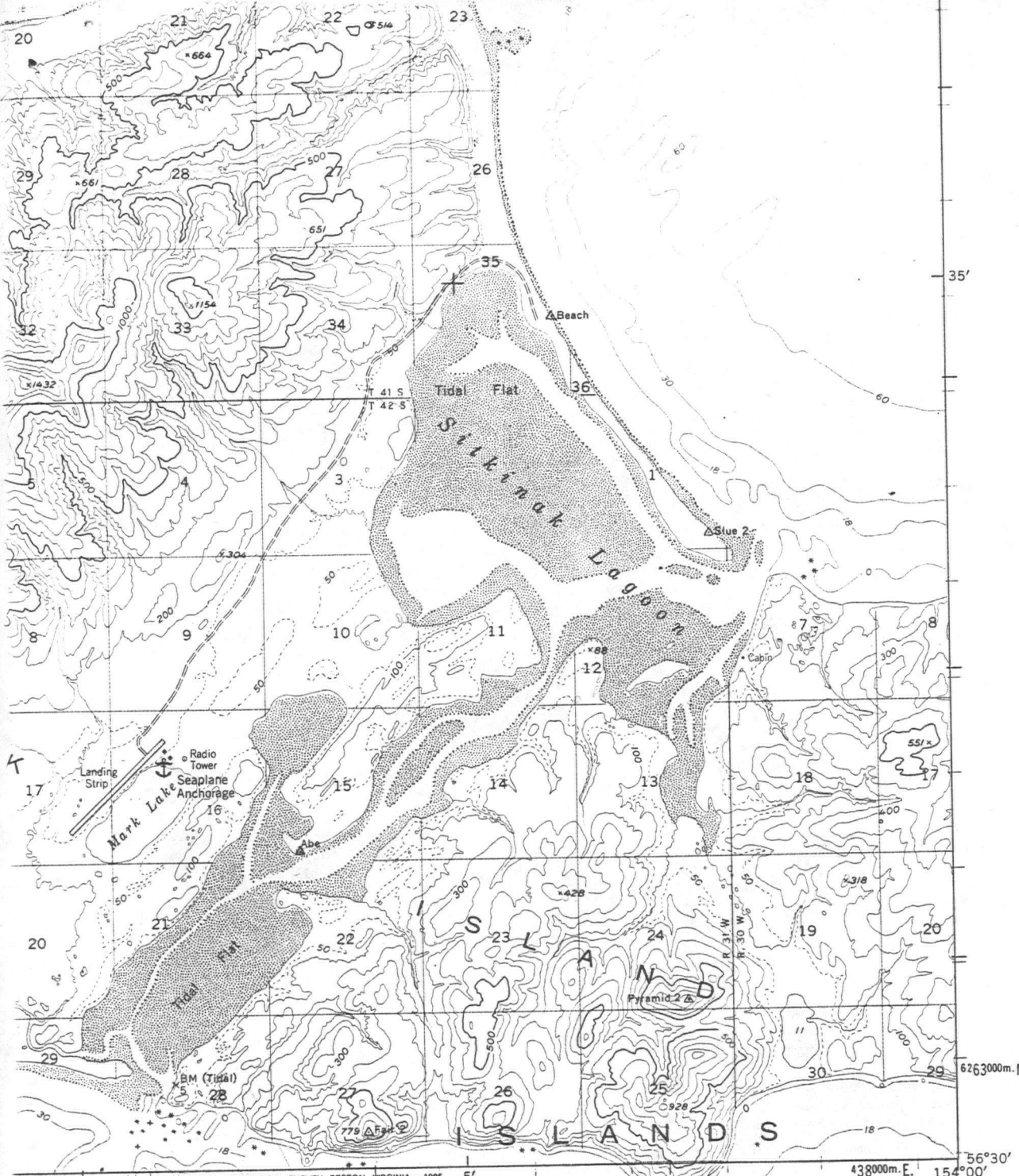
In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit must be made no later than thirty days before the expiration date of this permit or the planned effective date of the amendment.

9. Transfer

The Permittee may request to transfer this permit. The written request must include a certified signed affidavit from the proposed new permittee stating that they accept this permit in its entirety and waive their rights to an adjudicatory hearing. This department reserves the right to deny the transference of this permit.

10. File Location

A copy of the complete application is available for your review at the Department's Southcentral Regional Office at 437 "E" Street, Suite 200, Anchorage, Alaska 99501 (907) 274-2533.



100 FEET
FOOT CONTOURS
DATUM OF 1929
M IS MEAN LOWER LOW WATER
MATE LINE OF MEAN HIGH WATER
ROXIMATELY 8 FEET
GICAL SURVEY
80225. OR RESTON, VIRGINIA 22092
SYMBOLS IS AVAILABLE ON REQUEST



TRINITY ISLANDS (C-1), ALASKA

N5630-W15400/15X20

1952
MINOR REVISION 1986

ROAD CLASSIFICATION
Unimproved dirt

(KAGUYAK B-6)

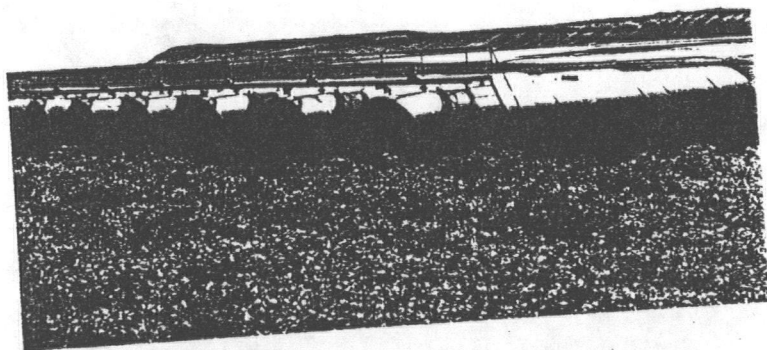


View of the above ground fuel oil storage tanks ~~passing~~ East towards the situated of lagoon. These tanks are approximately 25 ft. from the 600' ft. over-run near the north end of the runway.

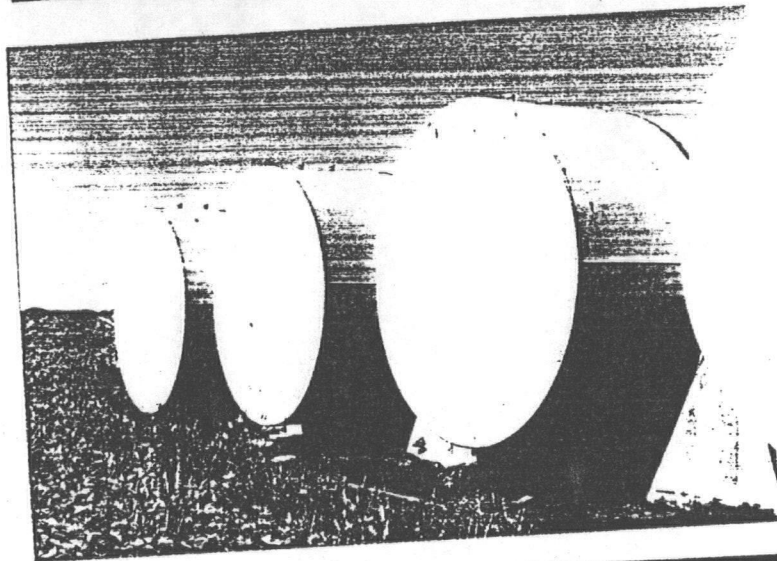
RECEIVED

JUL 06 1992

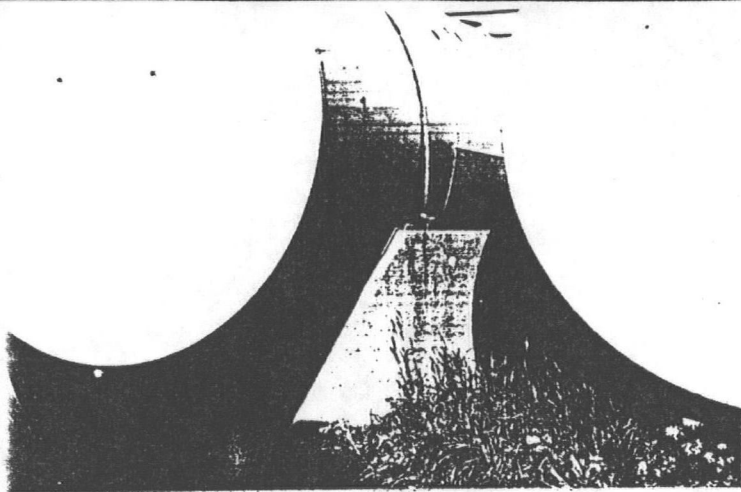
ANCHORAGE-A00/A



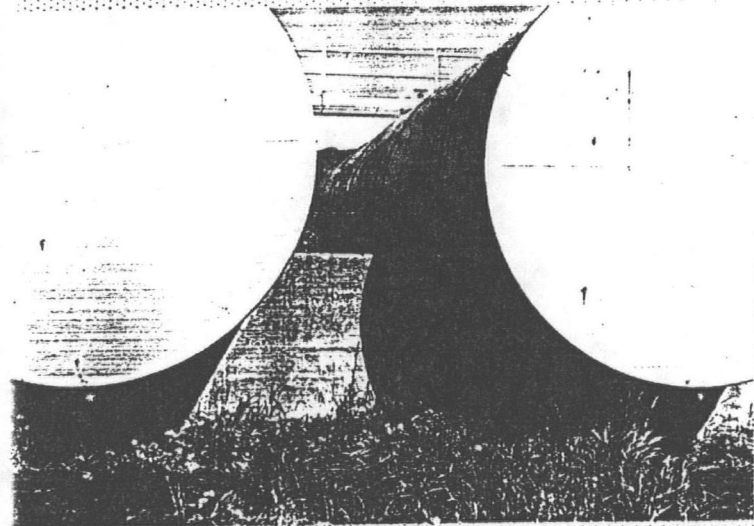
Northeast view from on top of the catwalk extending across the fuel oil tanks. Over-all condition of the top section on the tanks are in fairly good shape, considering how long they've been out of service.



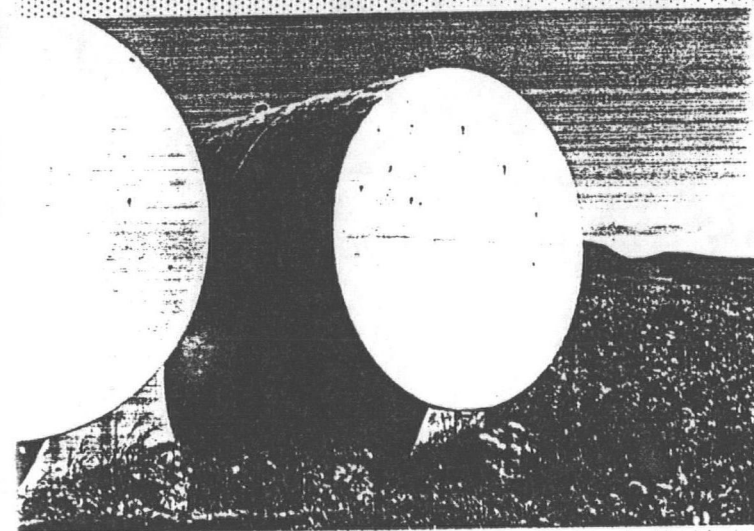
View of the South-east side of the Storage tanks were a large area of fuel oil has spilled into the ground. These tanks are numbered as 1, 2, & 3.



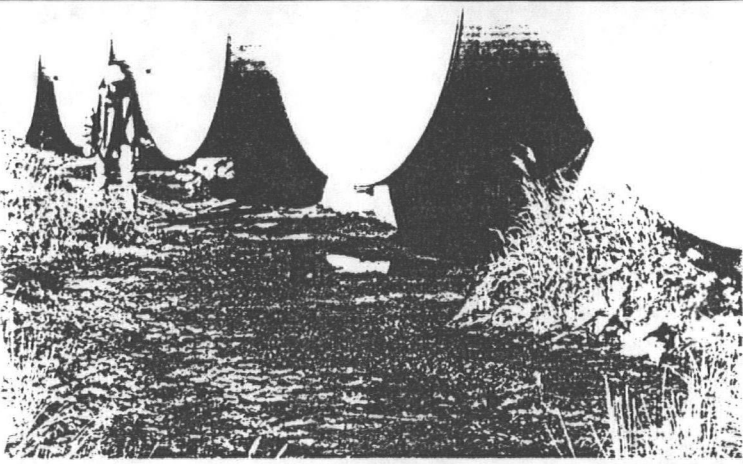
Picture of tank #4, note the pooling of fuel oil that has collected beneath the nozzle area.



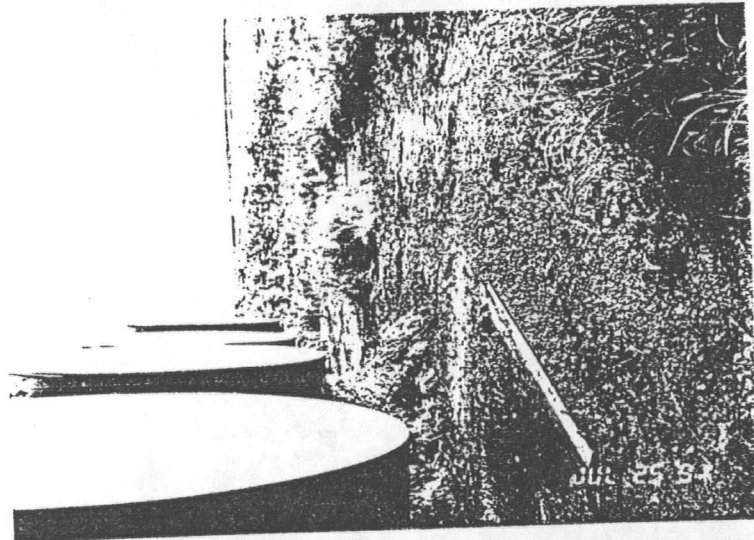
Tanks #5 & 6. Note the contamination areas just below the nozzles located on and beneath the tanks.



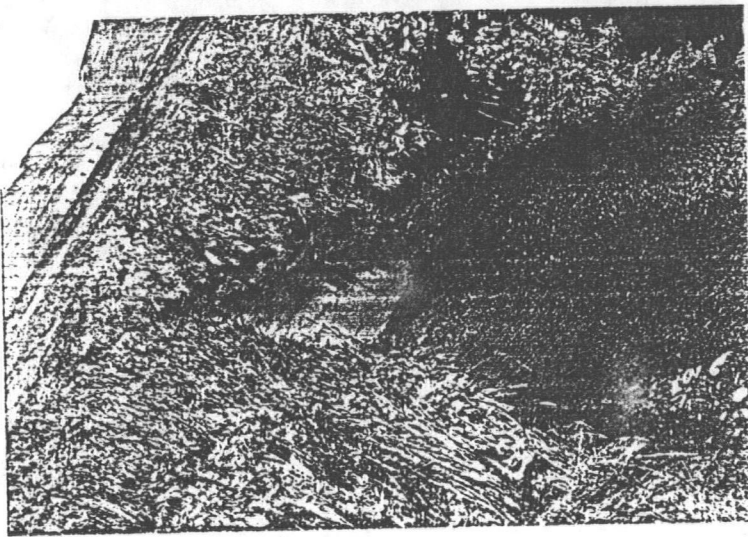
Tanks #6 & #7. Same conditions also exist here as in the other areas of the tank farm.



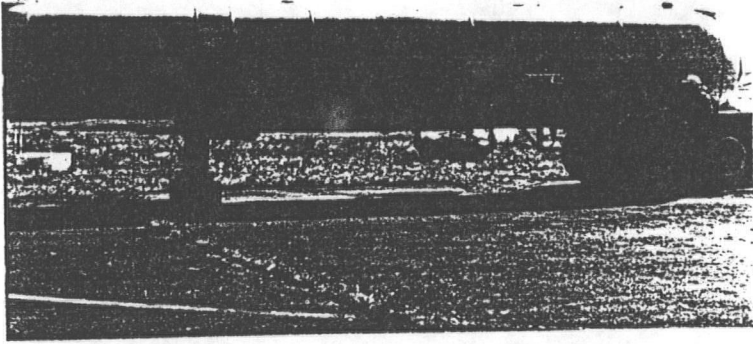
View looking up slope from Tank #7 to Tank #1 of contaminated area. The fuel oil contamination can be seen to extend 25 ft. beyond the tanks and spreads out as it flows down grade.



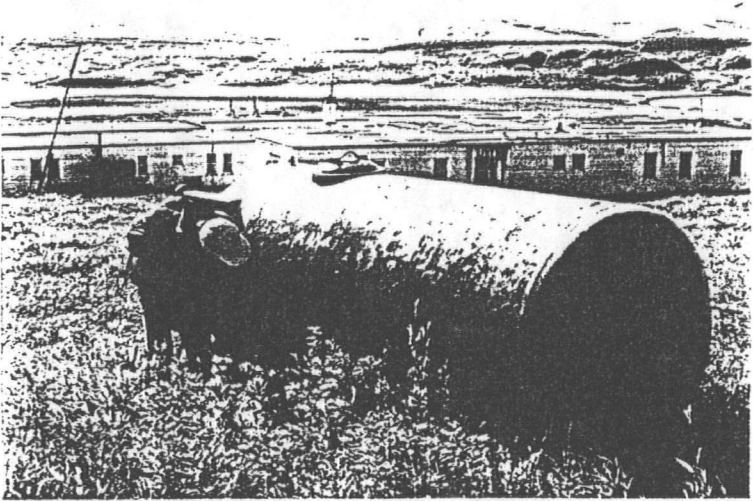
View of the contaminated area looking down slope from Tank #3 to #7. The extent of the contamination can be seen quite well here. The fuel oil is slowly migrating into a nearby stream that connects to the saltwater lagoon to the east.



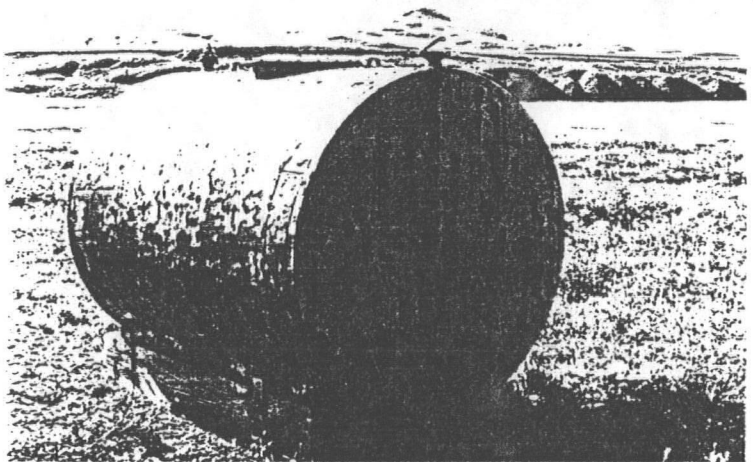
View looking west of the fuel oil storage tanks. The discharge of contaminants from both the storage tanks & the sewage treatment plant has adversely effected the stream. Several oily deposits can be seen throughout the portion of the stream.



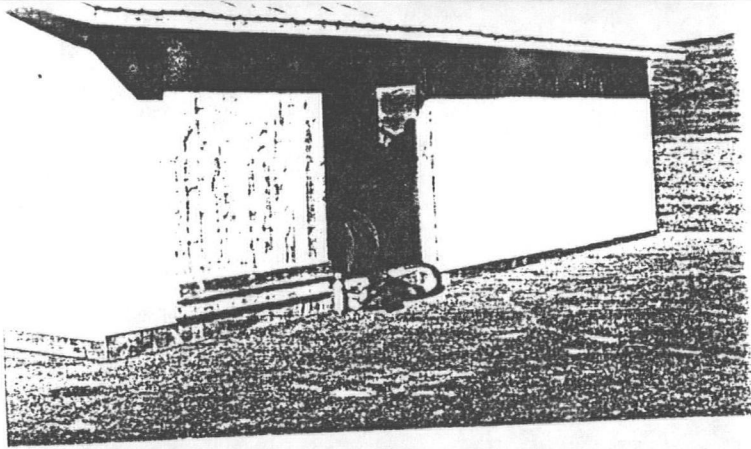
*Picture of the yellow gasoline
tanks used by the ranch hand
for various jobs on the island.*



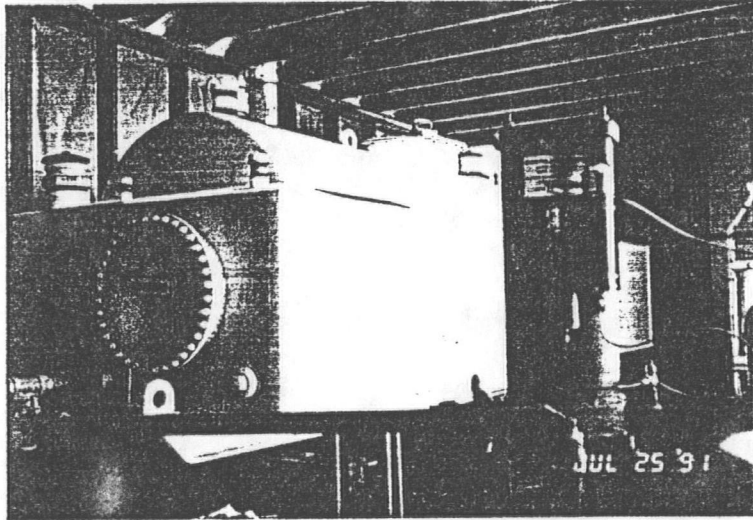
*Green storage tank just behind
and below the tanks, no
evidence of any leakage or
spills. Content and use are
unknown at this time.*



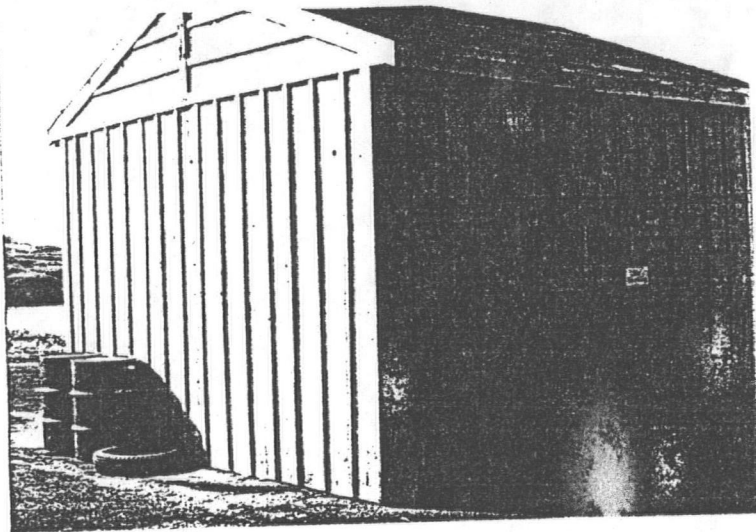
*Another storage tank located
just behind the SP-5 refueling
area. No evidence of leakage
from this tank. Contents &
use are unknown at this time.*



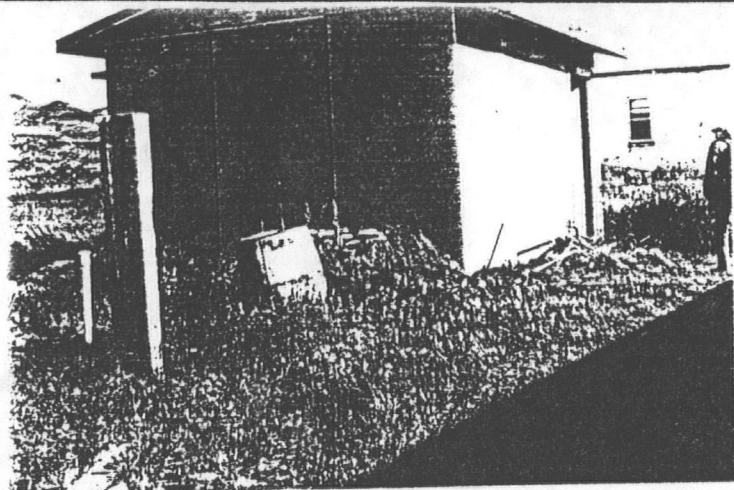
JP-5 storage shed used to house the emergency JP-5 fuel tank used by CG KDKAS.



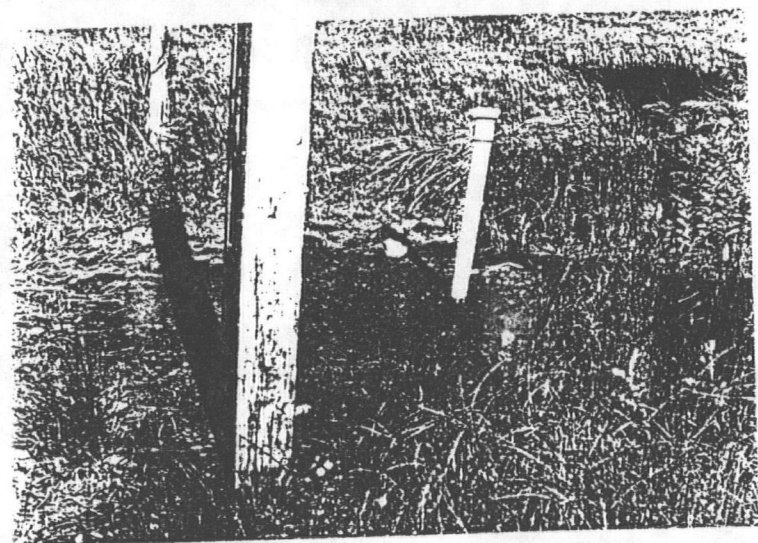
Picture of the JP-5 emergency refueling system used to refuel the CG HH-3's. Periodical testing is done to survey the fuel & the water content percentages.



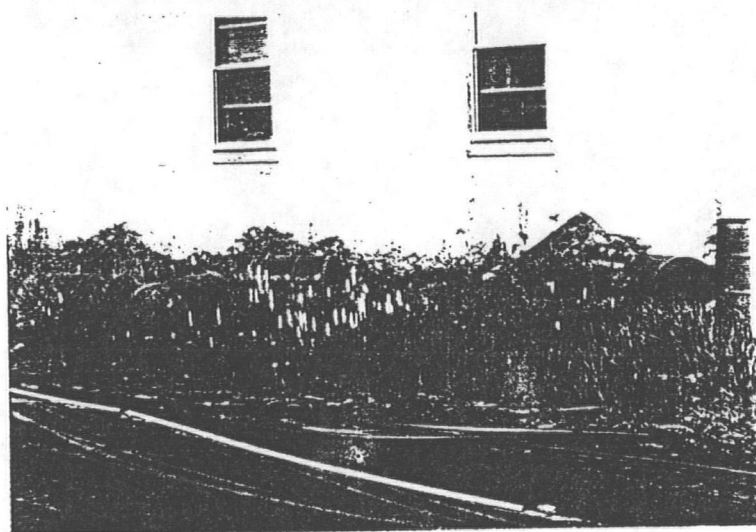
Storage shed used by the CG KDKAS for various miscellaneous items. A storage cabinet is used to house several pint size solvent containers. The two red drums are used to store waste JP-5 & water accumulated during their bi-monthly testing of the JP-5 fuel tanks.



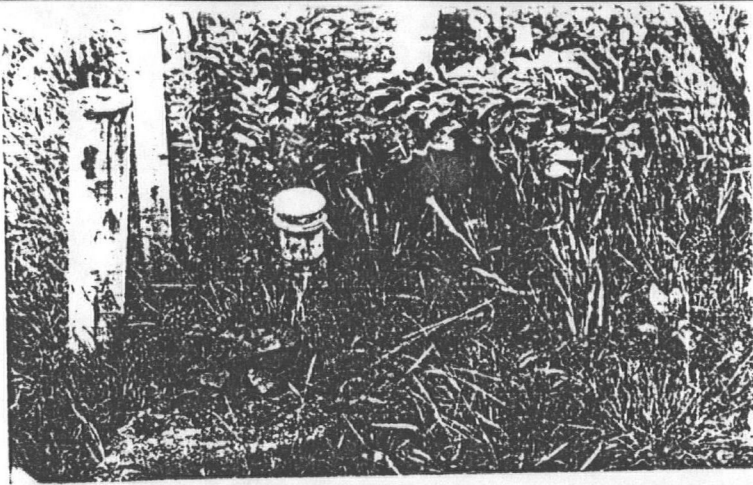
Picture of the back of the incinerator building used to burn the rubbish generated by the facility at one time. An old drum has been abandoned, contents unknown. There is also an 1,000 gallon diesel fuel tank used to power the incinerator. The building is now being used as a steam room by the ranchers.



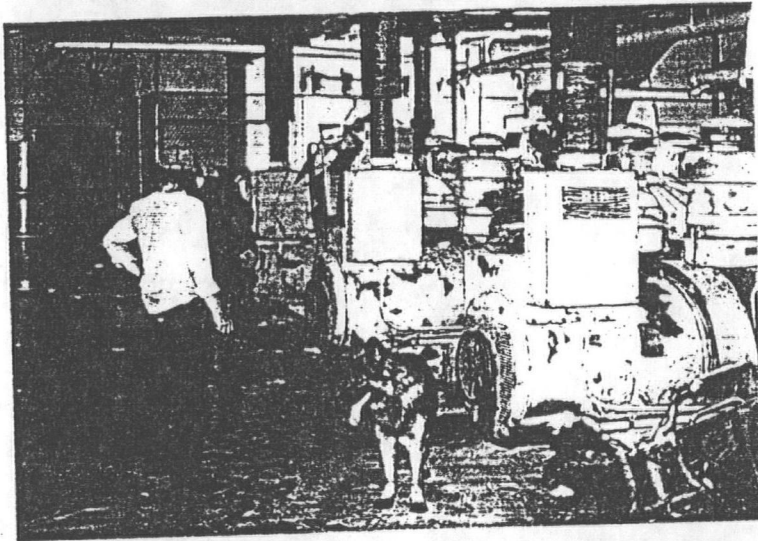
Fill pipe on the 1,000 diesel tank just behind the incinerator building. There is a large amount of fuel oil that has spilled over onto the surrounding area saturating the soil.



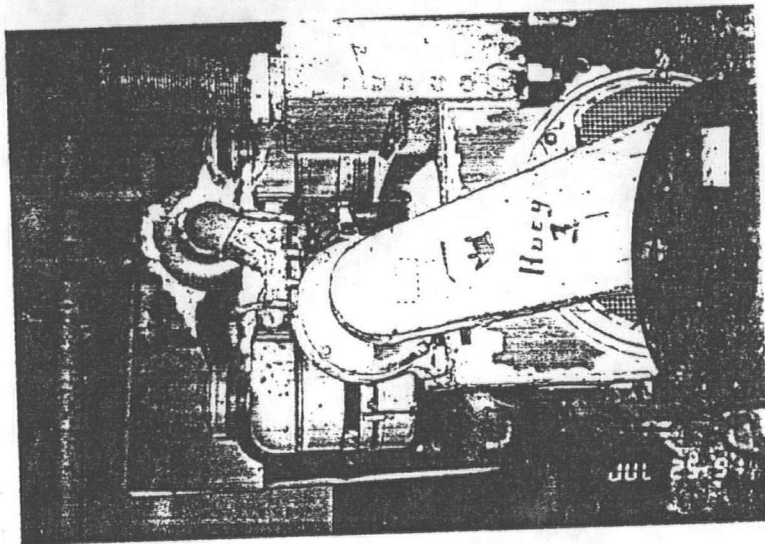
Picture of the old storage drums used at the facility lying around the inside compound area. The drums are weathered and are empty.



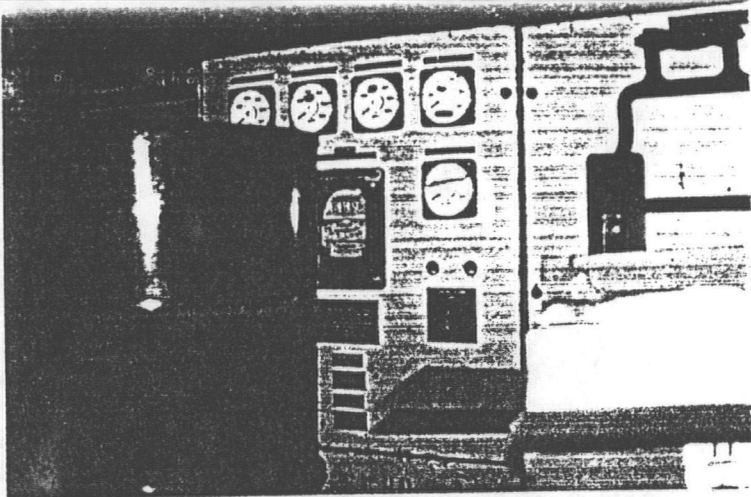
Fill pipe on the 2,000 gallon
UST used to house gasoline.
one is located near the south-
west wall of the Signal &
Power building. No evidence
of any spills or leakage.



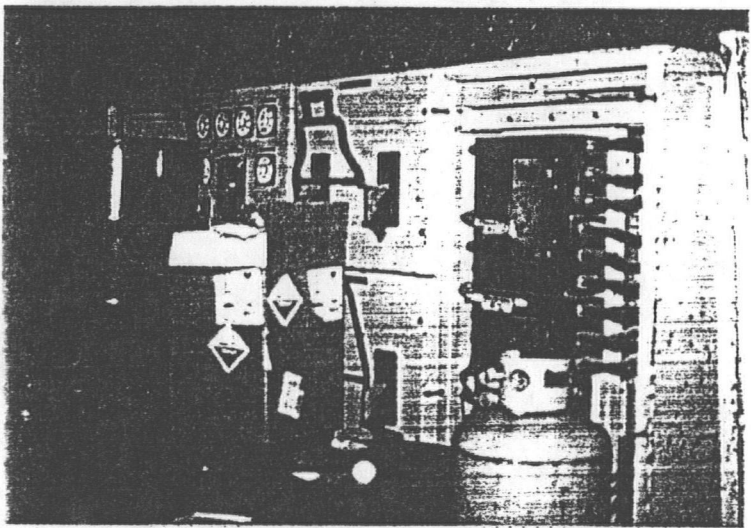
Close-up view of the Signal & Pow-
er building. Picture shows several
generators used to power the
facility. Abandoned empty
storage drums stored in this
area. Drums appear fairly
new - may belong to the
ranch hands.



Crumbling Asbestos is laying
on and around the generators
much of the material has
started to deteriorated and
may cause a breathing hazard



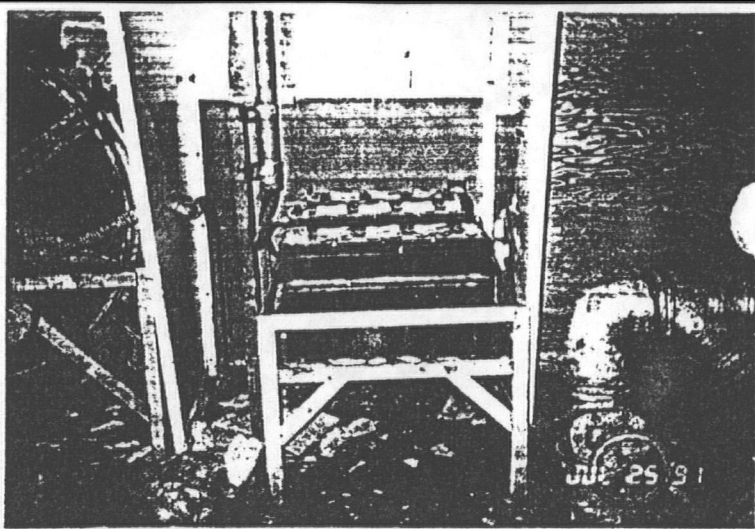
View of the electrical control panels & equipment used at the facility.



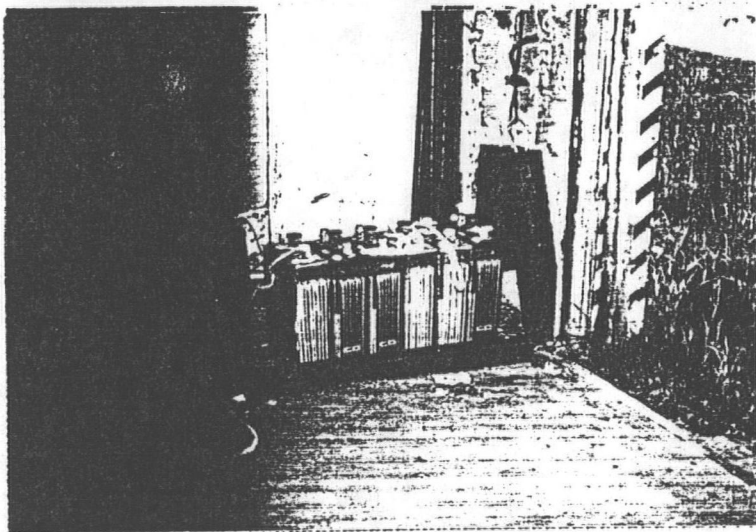
Another view of the electrical panels & equipment used by the facility at one time.
Possible that some of the electrical equipment is PCB filled. Will need to dismantle the unit to confirm.



Some more empty storage drums stored inside the signal & power building.



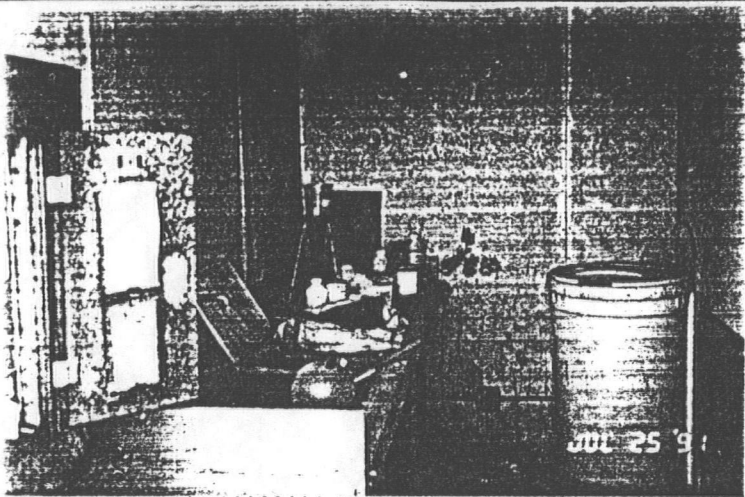
Abandoned batteries could be seen at several locations throughout the power building.



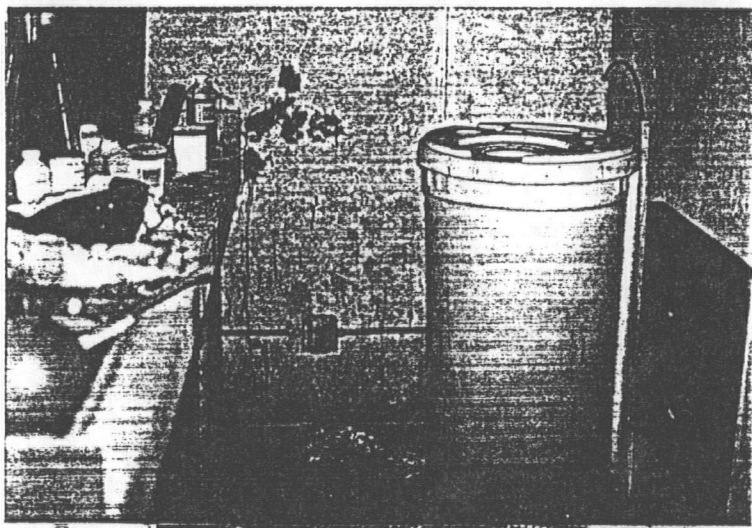
Again, some more abandoned batteries used to provide power to some units as a backup.



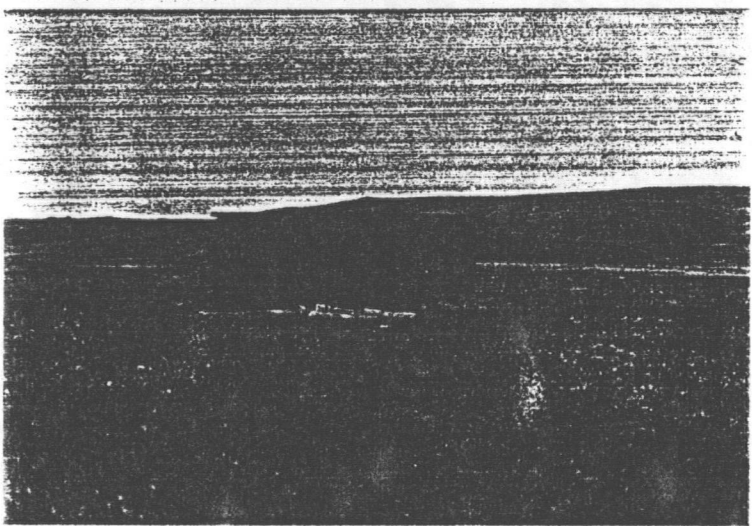
View facing due south toward Mark Lake. The underground water cistern stored the water pumped in from Mark Lake. Three hatches can be seen covering the cistern, unable to inspect inside cistern due to limited ground time.



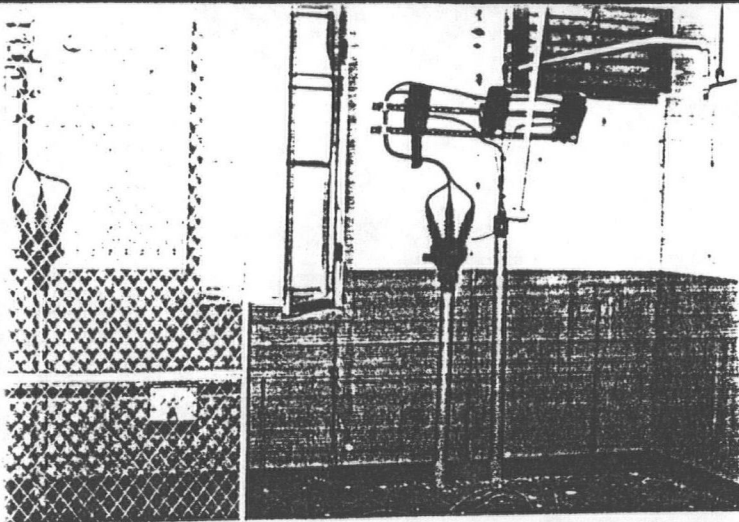
View inside the garage. Treatment plant which is located about 25 ft. north-east of the Signal & power building



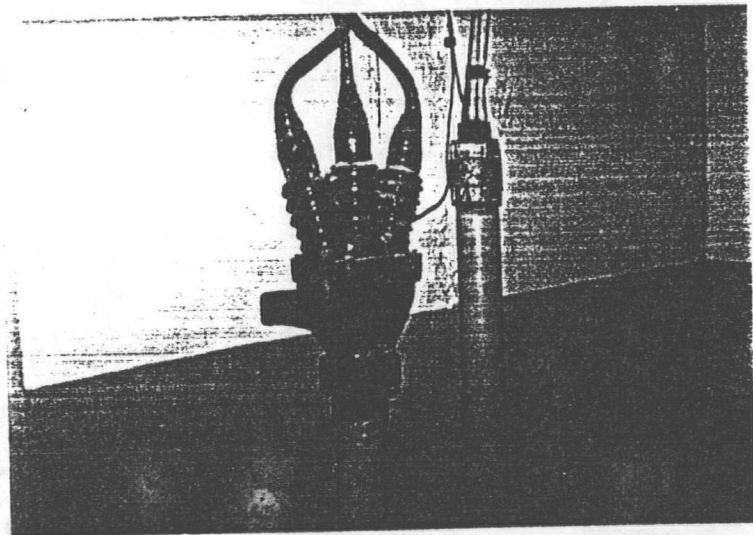
A very strong chloride smell was coming from this building. The conditions of the area were very poor - a lot of live chemicals were laying about.



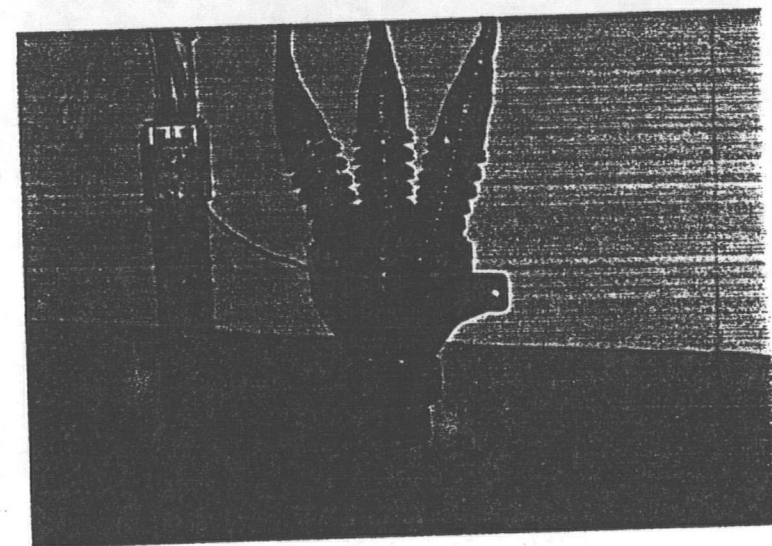
View looking East at the transmitter Building. Parts of the roof were laying about the surrounding area.



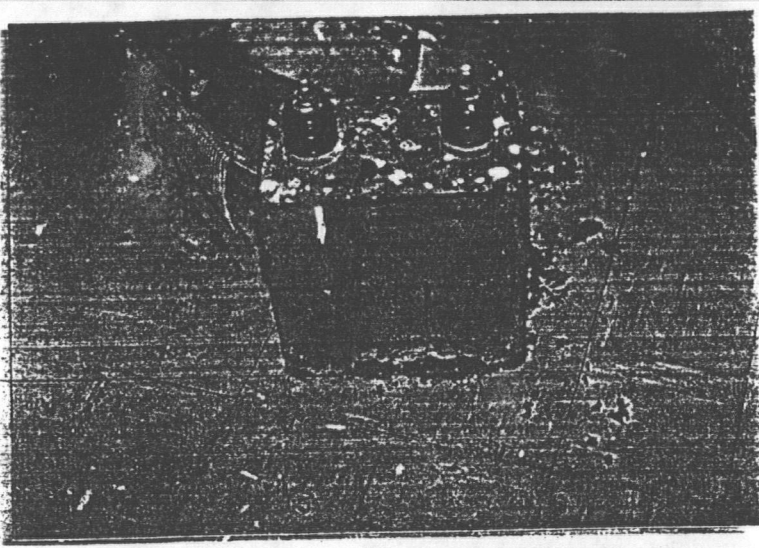
Inside transmitter building
showing 2 potheads mounted
on the south wall.



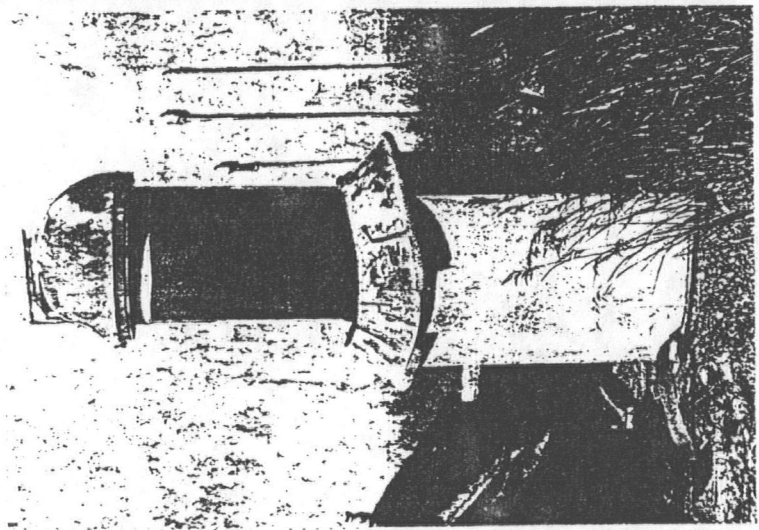
Pothead #1.



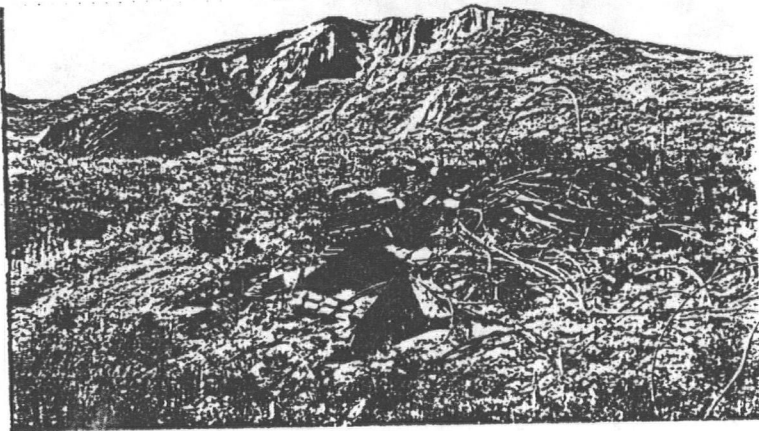
Pothead #2, with a little
effort these units could
be removed & packaged
for disposal.



A 100 lb. capacitor that was used as a door stop.



This unit was located outside on the East wall. On electrical unit were the base of the antenna had once sat.



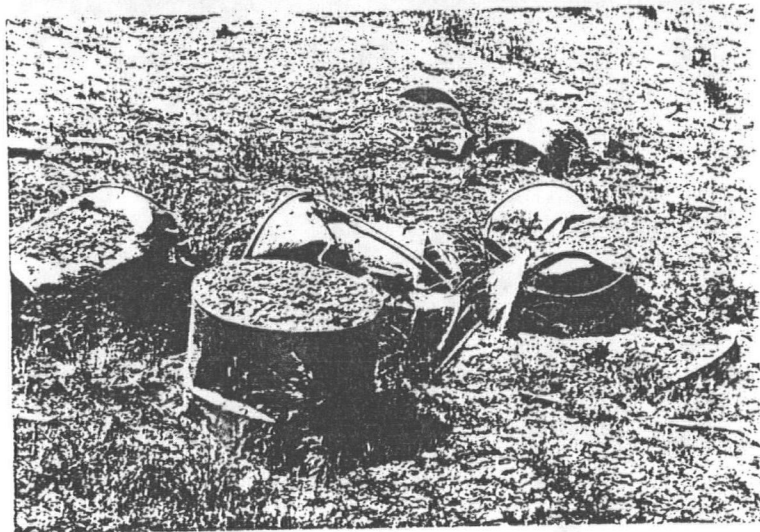
Battery dump site found on the way to landfill area #1, located South west of the facility.



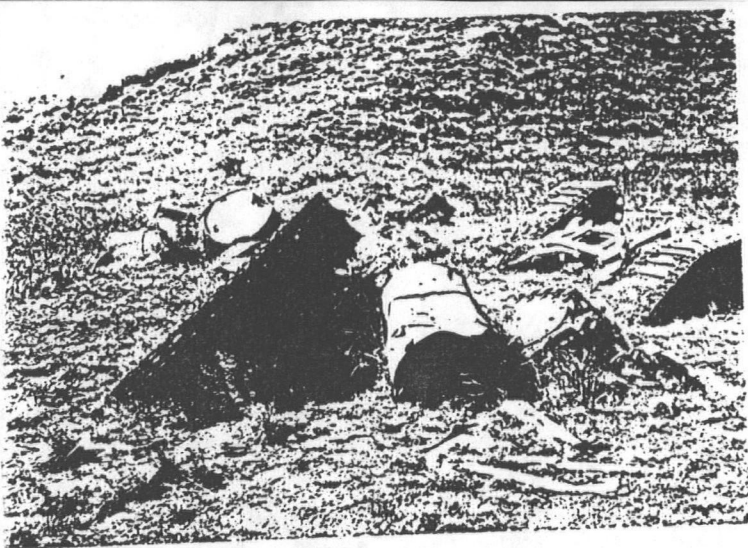
*A closer look at the
same dump site.*



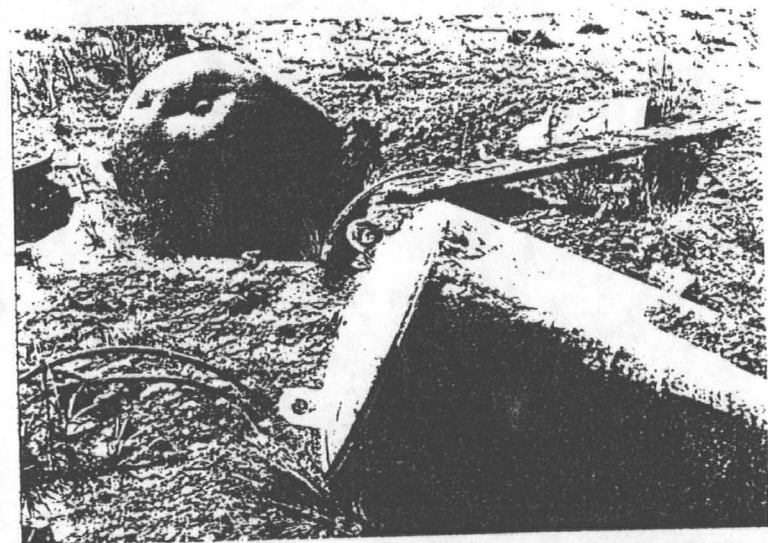
*View of the landfill facing
North with various items found
partially buried.*



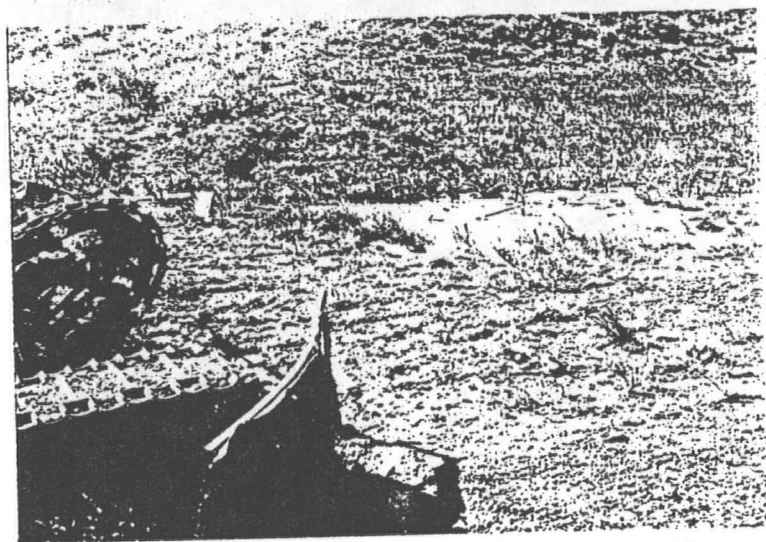
*An undetermined number
of drums were found partially
buried at several locations
throughout the landfill. Com-
bination of wind, rain runoff to
the south slope has exposed
most of the items. Drums
were empty at time of inspection.*



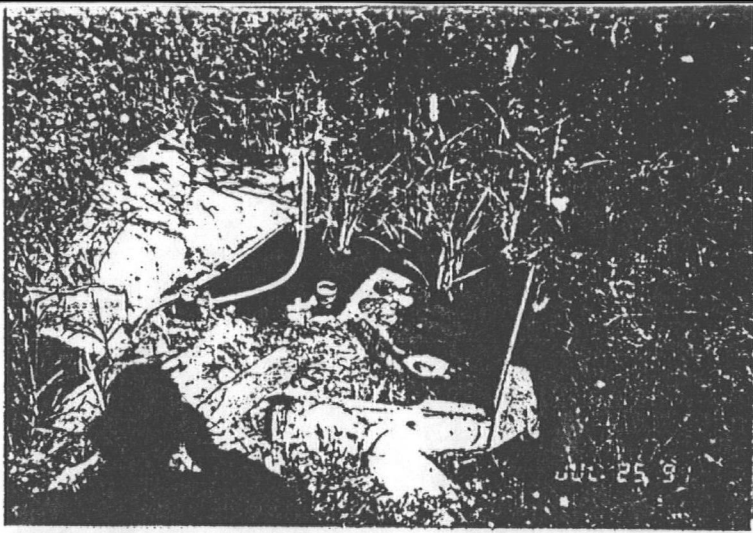
Several drums and tanks
parts were found partially
exposed due to runoff
from north slope area.



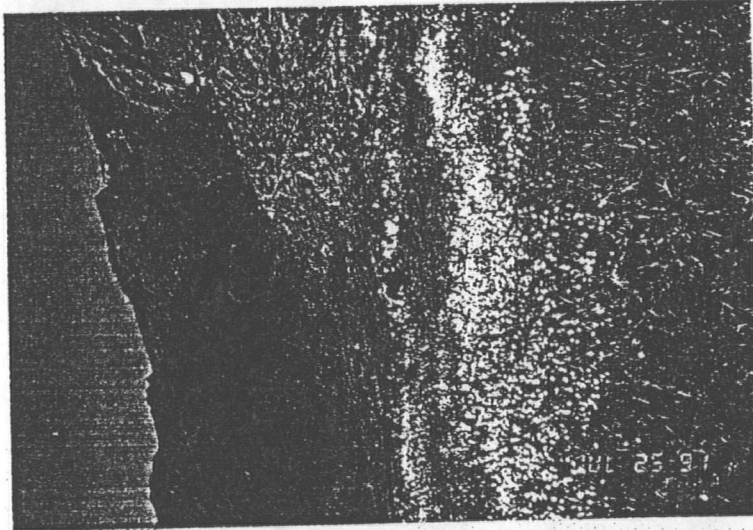
Partially exposed compressor
or storage tanks found in
the landfill.



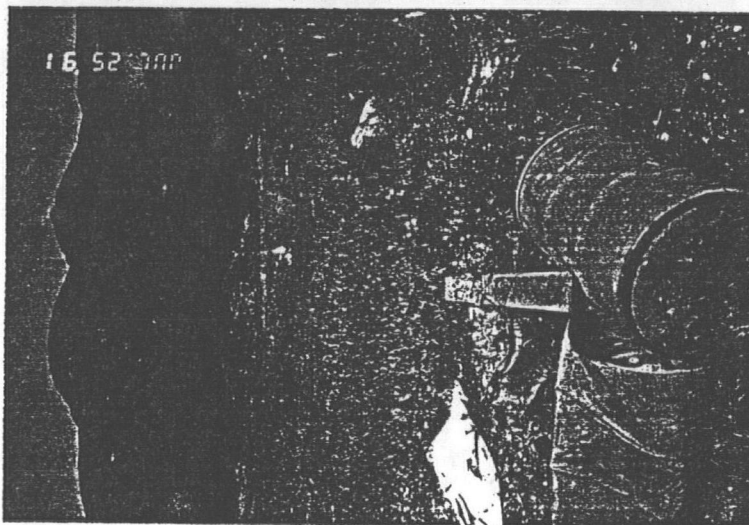
Small pools of water, or
a substance had accumulated
on the surface of the landfill.
This was to only unrecognizable
deposit in the area.



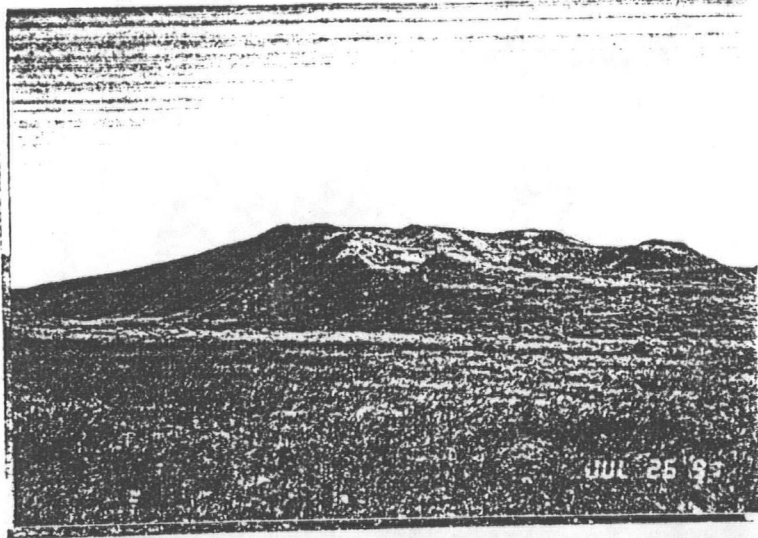
Water that has accumulated in 4 around a partially exposed engine block..
Please note that the color of both parts of water are different.



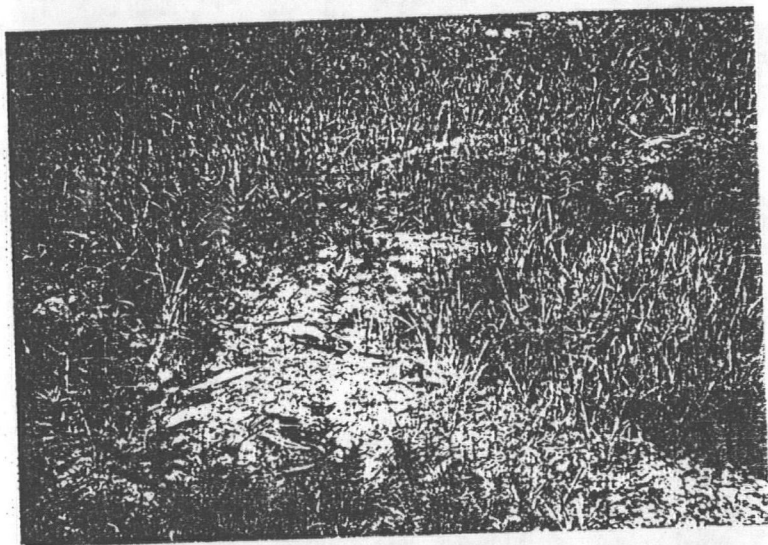
View looking due south across the landfill up the slope. run-off from the slope is depositing in the landfill and is then pushed out of the landfill again by heavy rains.



View looking north from the slope out across the landfill. Much of the runoff from the south slope is washing into the landfill.



View of the 2nd landfill
from the road, located
north of the facility.
The landfill is located just
off the access road leading
to the beach.



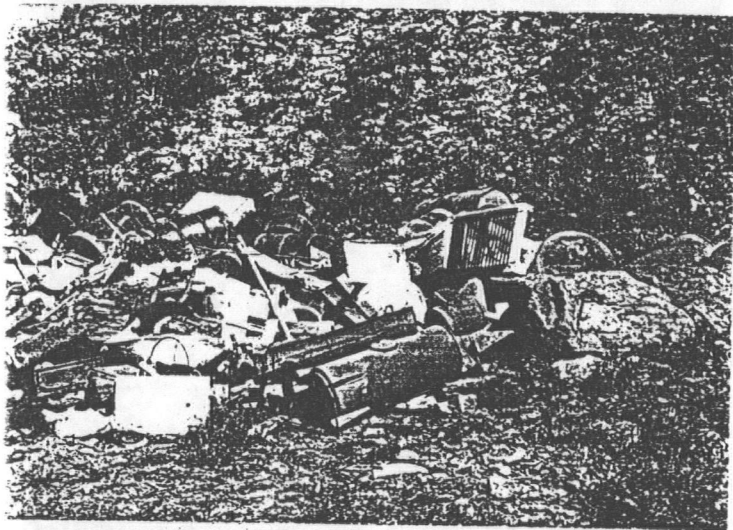
Very old battery dump site
found along the trail lead-
ing up to the landfill. This
site appears to contain the
innards of broken batteries
which have deteriorated
over time.



This is the pile of debris
accumulated over time by
the ranchers, miners, and all.
It appears that someone was
using the landfill for a number
of years until the road
leading to the landfill or
was washed out.



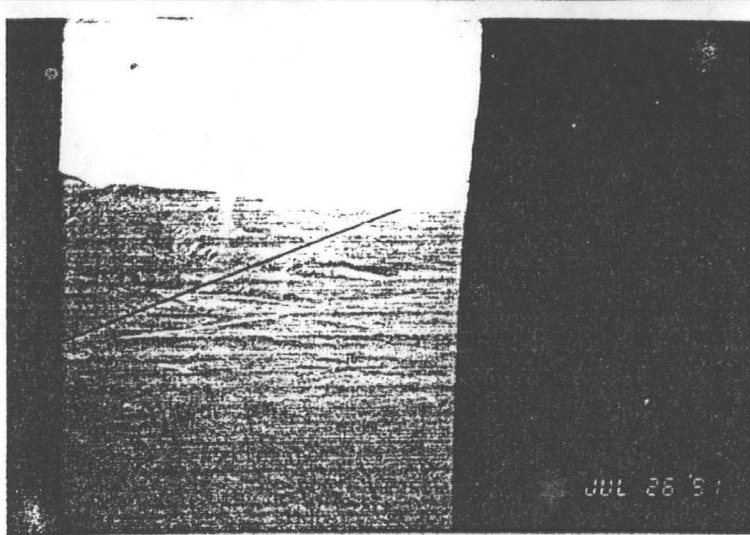
Several small house hold
containers were found to be
lacking their contents onto
the ground. Most of the
larger containers were found
to be empty.



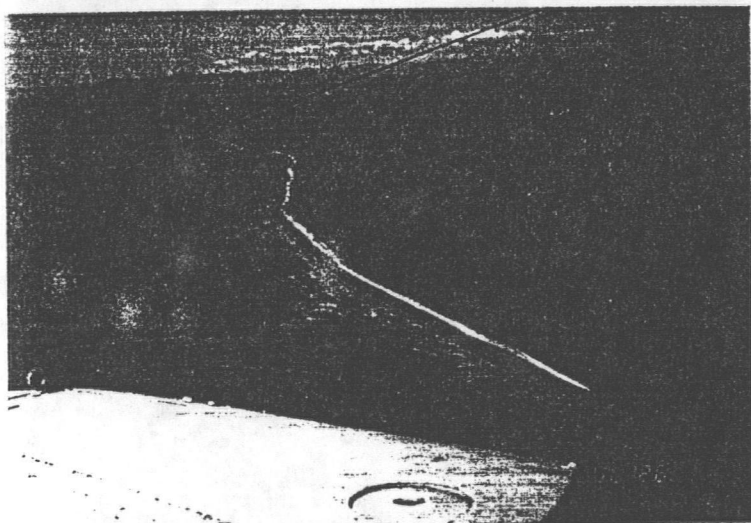
Same trash pile different
view.



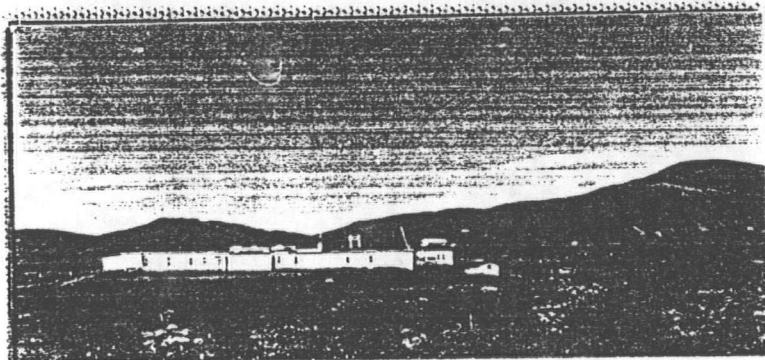
Same trash pile different
view. (Backside).



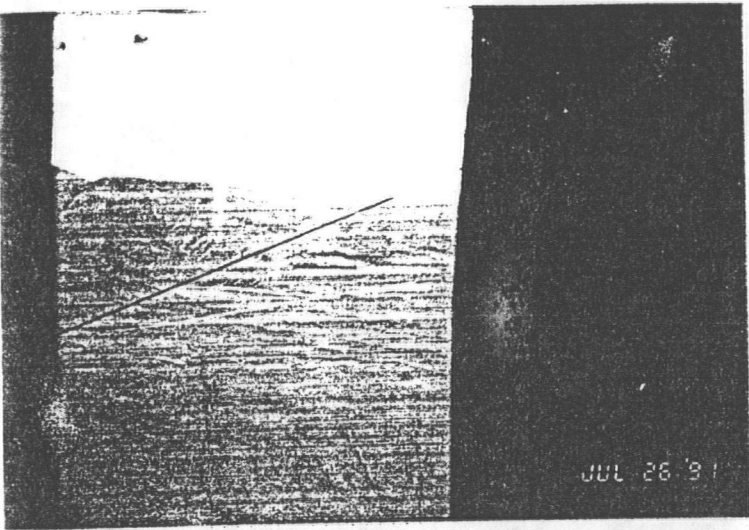
Aerial view of the road leading out to the beachfront. Several small buildings could be seen all along the access road. Outcroppings of these buildings are yet unknown.



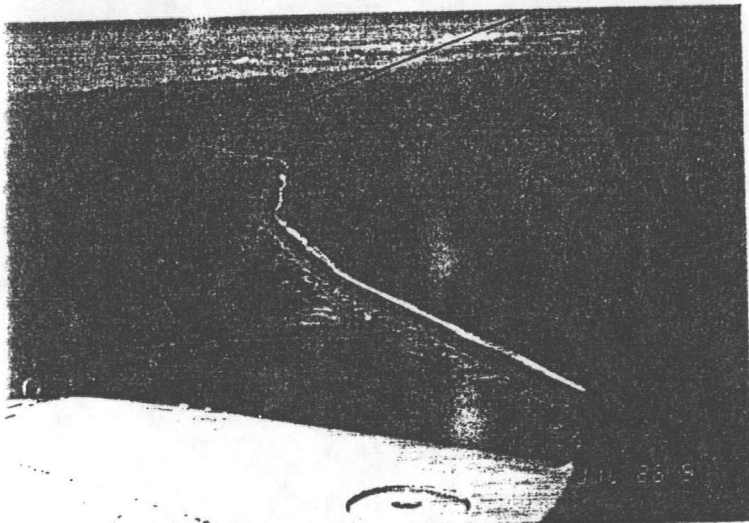
Aerial view of the access road leading to the beachhead. 300,000 gallon tank located there for easy storage! We were unable to inspect this tank due to the access road being washed out.



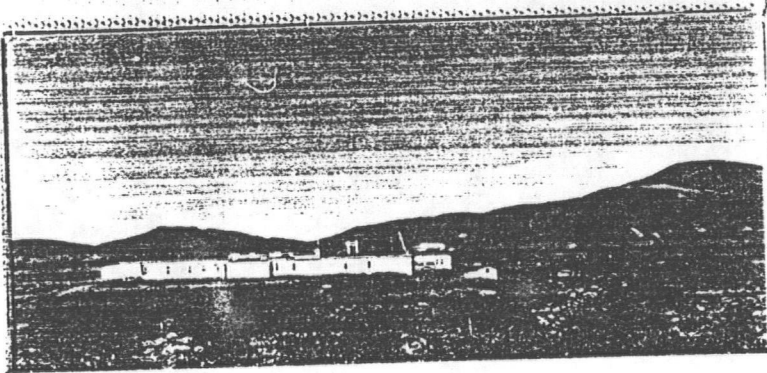
Extra photos!



Aerial view of the road leading out to the beachfront. Several small buildings could be seen all along the access road, ownerships of these buildings are yet unknown.



Aerial view of the access road leading to the beachhead. 300,000 gallon tanks located there for easy storage! We were unable to inspect this tank due to the access road being washed out.



Extra photos!